

2010 - 2011

4-H/FFA

Ag Judging Handbook



CROPS
DAIRY
DAIRY FOODS
ENTOMOLOGY
FORESTRY
HORSE & PONY
HORTICULTURE
LIVESTOCK
MEAT EVALUATION
POULTRY & EGGS
SOILS
WIDLIFE HABITAT



“Judging is a method of teaching and a way of learning”

Purdue University
Cooperative Extension Service
West Lafayette, Indiana

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HELPING TOMORROW'S LEADERS TODAY!

Success in any field depends to a great degree on one's ability to make the right decision at the right time. The opportunities offered through Indiana's 4-H/FFA career development events contribute to a young person's success in the following manner:

First, young people are taught to make decisions based upon sound educational principles. These principles form the basis for applying judgment in the decision making process as a life skill. Judging forces one to make choices. Through continued practice, young people find that judging trains the mind in sound reasoning. In a similar manner, judging trains young people to apply principles in the process of making choices.

Second, judging teaches a young person to study animals, birds, crop samples, insect identification, forestry management, horticultural samples and soil profiles. By looking at both strong points and weak points of individual judging specimens, young people experience a thought process that requires their evaluation of all dimensions of the situation in arriving at a logical decision. There is no substitute for a mind trained to see all sides of a problem or an opportunity.

Third, an able judge is objective. The judging experience teaches an individual the value of using principles. The experience gained in using acceptable principles in the appraisal of the differences between class specimens is at the very heart of the judging experience. Judging programs are designed to achieve this experience for the young people.

The values of participating in 4-H/FFA career development events include:

1. Learning to evaluate traits of economic importance and making sound, logical decisions.
2. Learning to accurately describe and compare animals, specimens, samples, land sites, etc., with proper and accepted terminology.
3. Learning to establish and defend conclusions.
4. Learning to speak and present ideas in a convincing manner.
5. Stimulating interest in agricultural commodities.
6. Improving the power of observation and memory development.
7. Building personal confidence and promoting team spirit.
8. Contributes to development of positive leadership skills
9. Develops inquiring minds and teaches decision-making through real life participation.
10. Creates a positive impact on college enrollment and major areas of study.

The skills of observation, analysis and communication are lifelong. Contestants in these career development events enjoy fellowship, fun, teamwork and the competitive spirit generated through a judging experience.

Career development events are a natural for volunteers and for young people. Pick a subject, train a team, join in on the action of helping tomorrow's leaders today!

Norman D. Long
Retired Extension Specialist
4-H/Youth

Managing 4-H/FFA Area and State Judging Contests

Situation

The Indiana 4-H/FFA Judging partnership has been a classic example of a true collaboration at the local and state levels. Both organizations have committed major resources to the program and both have benefited through shared participation in the program. In every partnership/collaboration, however, the organizational resource allocation/benefits received ratio needs to be reviewed occasionally to affirm perceived outcomes. Because of changing needs, participation, and costs, there appears to be a need to revise resource allocation in this partnership to better equate to participation (outcomes) by each organization.

Present Situation

In 2000 - 2001, 2119 youth participated in 13 4-H/FFA state judging contests. The breakdown of participation by each organization is attached. Area qualifying contests are held in 8 programs with Extension educators serving as area coordinators and site hosts for each. The state 4-H/FFA judging contests are managed by Extension Specialists and the chairperson of the State 4-H/FFA Judging Committee (composed of 10 Agriculture Education Instructors and 10 Extension educators) is a member of the 4-H Youth Department. State FFA staff assists in coordinating state contests and securing donors for state contest winners from both organizations.

To better reflect resource allocation and program benefits, the following management responsibilities for the 4-H/FFA Judging Contests were initiated in the 1997-98 school year.

1. Management of all qualifying **area** judging contests is a joint responsibility between FFA and 4-H. The structure to make this happen is as follows: the State 4-H/FFA Judging Committee is composed of ten (10) members from each organization; i.e., a representative from each of the ten (10) Extension areas. Members on the committee have a two-year term (with one half of the committee being new each year) and serve as an area 4-H/FFA judging coordinator; i.e., communicate committee decisions to all teachers, coaches, and educators, call a fall meeting of teachers, coaches and educators to make area judging plans, insure that each host contest site has co-chairs (4-H and FFA representatives) to plan and implement specific contests, assign and clarify pre-contest tasks to teachers, coaches, and educators as well as day of contest responsibilities.
2. Management of all state 4-H/FFA judging contests is the responsibility of the Purdue University Cooperative Extension Service. FFA staff are invited and expected to assist as needed.
3. The State 4-H/FFA Judging Committee is under the leadership of an Extension Specialist with ten (10) voting delegates from each organization representing the ten Extension areas.
4. Securing of donors and recognition remains the responsibility of FFA.

PREFACE

4-H/FFA AG JUDGING IN INDIANA

The statewide career development program is a joint effort between the Purdue Cooperative Extension Service (through the State 4-H Youth Department) and the Office of Career and Vocational Services, Indiana Department of Education (through the State FFA Office). A statewide 4-H/FFA advisory committee guides the overall program. The chair of the committee resides in the State 4-H Youth Department, and the secretary resides in the State FFA Office.

The advisory committee meets twice yearly, (November and June) to evaluate the state career development events, to project possible alterations for the following year, and to finalize program content printed into a publication entitled the 4-H/FFA Ag Judging Handbook. Members of the State Judging committee have leadership and service roles in the operation of all respective contests.

The contests are annually conducted as follows:

- | | |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Skill-a-Thon | - The last Saturday in September or the first Saturday in October at the Boone County Fairgrounds |
| Soils | - Fourth Saturday in October in a selected Indiana county |
| Crops, Entomology, Forestry | - Second Saturday in December
Stewart Center – Purdue campus |
| Dairy Foods & Meat | - Last Saturday in January
Smith and Lilly Hall - Purdue campus |
| Wildlife Habitat | - Fall, date varies
Wright Center (Martell Forest) |
| Horse & Pony | - First Saturday in May
Hendricks County Fairgrounds |
| Poultry | - Next to last Saturday in May
Stewart Center - Purdue campus |
| Dairy | - Next to last Saturday in May
Animal Science Research and Education Center—Dairy Center |
| Livestock | - Next to last Saturday in May
Animal Science Research and Education Center—Machine Shed, Poultry-Sheep-Swine Facilities |
| Horticulture | - Second Saturday after Labor Day
Horticulture Building – Purdue University |
| Dairy Goats | - Cancelled for 2010 |

In addition to active state committee support, each event also has a subcommittee comprised of Extension Educators, coaches and interested volunteers to assist and advise in a supportive role.

Under the present organization, the specific responsibilities are as follows:

State 4-H Staff

1. Chair the State 4-H/FFA Ag. Judging Committee
2. Coordinate development of the 4-H/FFA Ag Judging Handbook
3. Posting the 4-H/FFA Ag Judging Handbook on the WEB
4. Publicity
5. Organization of Extension Educators to coordinate county, area and state level judging programs
6. Pre-registration and related follow-up
7. Event registration at each site
8. Tabulation
9. Evaluation
10. Entry information for respective national 4-H contests

State FFA Staff

1. Secretarial follow-up and support
2. Coordinate development of the 4-H/FFA Ag Judging Handbook
3. State awards
4. State event donor support
5. Distribution of rule changes and pertinent information to Agriculture Education Instructors
6. Event set-up and arrangements
7. Evaluation
8. Manpower from coaches and state FFA officers
9. Publicity
10. Entry information for respective national FFA contests

A similar coordinating committee operates at both the area and county levels to assure that 4-H and FFA contestants receive quality educational programming.

The Indiana career development events continue to grow and to prosper through teamwork, competition and the educational philosophy that "**judging is a method of teaching and a positive way of learning.**"

CONSTITUTION AND BY-LAWS FOR THE INDIANA 4-H/FFA STATE AG JUDGING COMMITTEE

Article I. Name

Indiana 4-H/FFA State Ag Judging Committee

Article II. Purposes

The purpose of this committee is to:

1. Establish criteria for the 4-H/FFA State Career Development Events.
2. Review and make changes to the 4-H/FFA Ag Judging Handbook
3. Provide input to the state 4-H and FFA staffs on the criteria, implementation, and mechanics of the career development events.

Article III. Membership

Section A: The membership shall be of four kinds:

Section B: Voting Membership - The voting membership shall be made up of ten Agriculture Education Instructors from each of the ten Cooperative Extension Areas in Indiana. For clarification, an Agriculture Education Instructor will represent the area within which the administration office of the school corporation for which he or she is employed, is located. Agriculture Education Instructors will be elected by their peers within each of the ten extension areas of Indiana.

There shall also be ten County Extension Educators elected by their peers within each area to serve as voting members. These County Extension Educators represent each of the ten Cooperative Extension Areas in Indiana. The ten Agriculture Education Instructors and ten County Extension Educators will each serve two-year terms. Agriculture Education Instructors from even numbered areas and Extension Educators from odd numbered areas will begin their appointments on September 1st of odd numbered years. Agriculture Education Instructors from odd numbered areas and Extension Educators from even numbered areas will begin their appointments on September 1st of even numbered years.

The Agriculture Education Instructors and the County Extension Educator from each respective area will serve as the Area Ag Judging Co-Coordination during their tenure on the State Ag Judging Committee. Division of area responsibilities between the co-coordinators will be left to their discretion, but each is expected to contribute their fair share.

A member can serve as many terms as desired as long as they are re-elected every two years by their peers.

Section C: A designee appointed by the head of the State 4-H Youth Department, that is a member of the State 4-H Staff, shall serve as the chairperson of the committee. The chairperson will only be allowed to vote when an even number of committee members are present, thus preventing a tie vote. The state FFA Executive Secretary - Treasurer shall serve as the secretary of the committee, but will not serve as a voting member.

Section D: Associate Membership - Any interested party concerned with the business of the committee may be an Associate Member with the right to discussion but will not have the right to move a motion and will not have the right to vote.

Section E: Consultant Membership - Members of the Purdue staff, the State 4-H staff, and the State FFA Department staff, may serve on the committee in a consultant capacity only. These members shall not be allowed to move a motion and they will not have the right to vote on any matter under the committee's discussion.

Article IV. Organization

Section A: The state 4-H/FFA Ag Judging Committee shall be composed of ten Agriculture Education Instructors and ten County Extension Educators. The chairperson of the committee shall be a state 4-H staff member appointed by the Head of the State 4-H Youth Department. The secretary of the committee shall be the Indiana FFA Executive Secretary/Treasurer.

Article V. Meetings

Section A: Regular Meetings - There shall be two regular meetings a year. One meeting to be held in October/November and another meeting to be held in June, preferably during the State Vocational Educator Training Conference.

Section B: Special Meetings - These may be called at any time by the chairperson. The chairperson shall notify all members at least one (1) week in advance of the special meetings.

Section C: A voting quorum shall be at least one-half of the voting membership.

Article VI. Procedures

Section A: A voting member to be considered in good standing must meet the following conditions:

- A. Attend all regular meetings.
- B. Show an interest in and take part in the affairs of the committee.

Section B: A voting member will be replaced by a representative of their respective affiliate (by the proper designee), if they miss more than one-half of the committee meetings held in a calendar year.

Section C: Each voting member shall have the right to be represented by proxy.

Section D: Voting will be done by secret ballot.

Article VII. Amendments

Section A: The Constitution and By-Laws may be amended at any regular meeting of the committee as long as the following conditions are met:

1. Each voting member has in writing the proposed change at least fourteen (14) days prior to the meeting.
2. A two-thirds vote of the voting membership present, providing those present constitutes a quorum.

Adopted: June 17, 1985

Amended: September 4, 1997

Amended: September 19, 1985

Updated terminology: July, 1995 - N. Long, Chair

Amended: May 6, 1992

2010/2011

**STATE 4-H/FFA AG JUDGING
COMMITTEE MEMBERSHIP**

AREA	AGRICULTURE EDUCATION INSTRUCTOR	ADDRESS
I.	Greg Curlin, gcurlin@switzerland.k12.in.us	Switzerland Co. High School 1020 W Main St Vevay, IN 47043 (812) 427-2469 (O)
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III.	Paul Steinmetz, psteinmetz@mail.nspencer.k12.in.us	Heritage Hills High School HWY 162 box 1776 Lincoln City, IN 47552 (812) 937-4472
V.	Tiffany Douglass, tdouglass@cloverdale.k12.in.us	Cloverdale High School 205 E. Market St. Cloverdale, IN 46120 (765) 795-4203
VI.	Duane Huge, dhuge@danville.k12.in.us	Danville High School 100 Warrior Way Danville, IN 46122 (317) 745-6431 Ext. 258 (O)
VII.	Pat Redden, predden@wwayne.k12.in.us	Lincoln High School 205 E. Parkway Drive Cambridge City, IN 47327 (765) 478-3948
VIII.	Roger Carr, carr@clinton.k12.in.us	Clinton Central High School P.O. Box 178 Michigantown, IN 46057-0178 (765) 249-2255 Ext. 237
IX.	Ron Wamsley, rwamsley@rcsc.k12.in.us	Rensselaer High School 1106 E Grace Street Rensselaer, IN 47978 (219) 866-5175
X.	Kraig Bowers, kbowers@fairfield.k12.in.us	Warsaw High School 1 Tiger Lane Warsaw, IN 46580 (574) 267-5174
XI.	Jamie Earnhart, earnhartj@centralnoble.k12.in.us	Central Noble High School 302 Cougar Court Albion, IN 46701 (260) 636-2117 Ext. 7502

Ag. Education Instructor Terms Begin on September 1st of the following years.

	2009	2010	2011	2012
Extension Area	2,6, 8, and 10	1, 3, 5, 7, 9, 11	2, 6, 8, 10	1, 3, 5, 7, 9, 11

EXTENSION 4-H STAFF

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VI.	Sarah Burke burkes@purdue.edu Hancock County Extension 802 North Apple Street Greenfield, IN 46140-1338 317-462-1113	XI.	David Addison addison@purdue.edu Whitley County Extension Whitley Co. Courthouse Annex 115 S. Line Street Columbia City, IN 46725-2393 260-625-3313

Extension Educator Terms Begin on September 1st of the following years.

	2009	2010	2011	2012
Extension Area	1, 3, 5, 7, 9, 11	2, 6, 8, 10	1, 3, 5, 7, 9, 11	2, 6, 8, 10

AGRICULTURE EDUCATION STAFF

Agricultural Education Program Specialist

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RULES AND OPERATION

The 4-H/FFA Ag Judging Handbook (4-H 98) has been prepared to assist Extension Educators, Agriculture Instructors, 4-H leaders and other interested coaches. The handbook covers rules, procedures, area boundaries, selection of representatives and supplies available to conduct the following career development events:

Crops	Forestry	Livestock
Dairy Cattle	Horse and Pony	Poultry and Egg
Dairy Foods	Horticulture	Skill-a-Thon
Entomology	Meat Evaluation and Identification	Soils
		Wildlife Habitat

These rules are effective beginning March 1, 2004. Coaches, team members, and individuals must assume the responsibility to acquire the most up-to-date copy of the 4-H/FFA judging handbook. The handbook may be obtained from the Internet by linking to the State 4-H/Youth Department's homepage or the State FFA homepage.

GENERAL INFORMATION FOR COUNTY AND/OR AREA CONTESTS

- A. Responsibilities of Host or General Area Chairperson
1. Attend state judging coordinators meeting.
 2. Set up and conduct an area wide meeting of Extension Educators, Ag. Education Instructors, and other coaches.
 - a. Hold an area meeting in a central location prior to the fall meeting of the State Ag Judging Committee.
 - b. Set up dates for all area events.
 - c. Select location and facilities.
 - d. Review 4-H/FFA Ag. Judging Handbook with interested coaches and Extension staff.
 - e. Make assignments of different event chairmen and committees and their responsibilities.
 - f. Discuss food services for entire group on dates of events.
 - g. Discuss any rule changes or event operation changes.
 3. After area planning meeting.
 - a. Send completed organizational chart to the State 4-H Office.
 - b. Inform State 4-H Department of dates and locations of area events.
 - c. Help livestock, dairy and horse and pony area-level chairperson make contact with local breeders to obtain animals for area judging event.
 - d. Make contact with food service personnel in cooperation with the hospitality chairperson.

- e. Contact official judges for the event in cooperation with the appropriate event chairperson.
- f. Order needed ribbons and awards not furnished through the State 4-H Office through a vendor of choice.
- g. Make sure all buildings and facilities are available on the date of the event.
- h. Contact Purdue Agronomy and 4-H Youth Departments to make sure judging kits will be available on the date of the area event.
- i. Contact the State 4-H Youth Department for help in organizing the Dairy Foods and/or Meat Evaluation CDEs and for appropriate supplies.

B. The following materials are obtained from the respective department:

1. Grain samples, placing sheets and area quiz - for the crops contest, these are ordered through:

Agronomy Department
Life Sciences Bldg., Purdue Univ.
West Lafayette, Indiana 47907
Extension Agronomist (765) 494-7731

2. Insect specimens are maintained by Area CES personnel. Quizzes for the area entomology contest are provided by Dr. Tim Gibb to Dr. Natalie Carroll for distribution.
3. Forestry contest specimens are maintained by Area CES personnel. Area Forestry quizzes are provided by the 4-H/FFA Forestry Committee.

4. Horticulture judging kit and area quizzes - are ordered through:

Dr. Kathryn Orvis
Extension Youth Specialist
1161 AGAD Building, Purdue Univ.
West Lafayette, Indiana 47907
(765) 494-8435

5. Score cards for the poultry and egg judging contest are available through:

Dr. Colleen Brady
Extension Youth Specialist
1161 AGAD Bldg. - Purdue Univ.
West Lafayette, Indiana 47907-1026
(765) 494-8439

C. Printed Supplies for County/Area contests may be ordered through:

Agricultural Communication
Media Distribution Center, Purdue University
1187 Service Building
West Lafayette, IN 47907-1187
Telephone: 1 888 398-4636
FAX: (765) 496-1540
Email: Media.Order@ces.purdue.edu
Website: <https://secure.agriculture.purdue.edu/store/>

1. Tabulation forms (4-H 573-W) - for recording the teams and individuals, their scores and final placing in each of the various classes they have judged. Eight teams may be recorded on one tabulation form. Available as Excel file at www.four-h.purdue.edu/cde
2. One placing card per person for each class (4-H 396) and one reason card per person for each reason class (4-H 250) - for dairy, horse and pony, horticulture, livestock, poultry, and dairy goat contests.
3. One soil score card per person for each class (4-H 394) and one home site score card per person (4-H 255) - for use in the soil judging contest.

Note: Computer software to register, score and tabulate has been developed for application with each event. Some modification in the above order of supplies will likely be necessary if the computer system is used with a county and/or area contest. Check with the State 4-H office for current information.

Note: To use the new Ag. Judging software it will be necessary to have access and use of a P.C.- and FileMaker 6 or higher software, computer with a minimum of 640K, preferably a hard drive to input contest, pre-contest registration, scoring and tabulation.

D. Two to three weeks before the event:

1. Contact all event chairpersons to see that all supplies have arrived: kits, score cards, answer sheets, etc.
2. Make sure all ribbons and plaques have arrived.
3. Contact the event chairperson to see that all needed assistance has been found, that judges have been contacted and that all needed animals will be available.
4. Re-contact food service people.
5. Contact news media.

E. On contest day:

1. Have all kits, score cards, pencils, official keys, Hormel cards, rubber bands and adding machines available.
2. Display ribbons and plaques where they can be seen.
3. Make sure event runs smoothly and efficiently.
4. Contact news media.
5. Make arrangements for collecting registration forms and fees.

F. After the contest

1. Hold evaluation meeting of all Extension Educators and coaches.
2. Send kits back, as required.
3. Send results to the news media.
4. Pay all bills and send thank you notes.

5. Send results, as noted below, along with appropriate registration fees to:

State 4-H/FFA Ag. Judging Chair
Purdue University
615 West State Street, Room 225
West Lafayette, IN 47907-2053

Skill-a-Thon	Deadline	September 17
Soils	<i>Deadline</i>	October 15
Crops, Entomology, and Forestry	<i>Deadline</i>	November 15
Dairy Foods & Meat	<i>Deadline</i>	January 15
Wildlife Habitat Evaluation	<i>Deadline</i>	October 1
Horse & Pony	<i>Deadline</i>	April 29
Dairy, Livestock, and Poultry & Egg	<i>Deadline</i>	May 10
Horticulture	<i>Deadline</i>	September 1st

CAREER DEVELOPMENT GUIDELINES AND CRITERIA

A. Team Designation

1. A team listed as an FFA team must be made up entirely of actively enrolled FFA members.
2. A team listed as a 4-H team must be made up entirely of actively enrolled 4-H members.
3. If all members of a team are active in both 4-H and FFA, they may be entered as either a 4-H or FFA team; however, team designation must be made at the time of registration for the area event. After this point, no changes will be permitted at either the area or state events. Exception: Team designation for Meat, Dairy Foods, Dairy Goat, and Horticulture must be made at the time of registration for the State Event.
4. A team or an individual may register in only one county for a specific career development activity.
5. The entire team must be made up of members of a local organization:
 - Junior FFA teams must be made up of members who originate from the school where they would normally attend and be Junior FFA members in the 7th or 8th grade. No Junior FFA member may be a member of a Senior FFA team.
 - Senior FFA teams must be made up of members who originate from the school where they would normally attend and all members be enrolled in 9th to 12th grades.
 - 4-H teams must be **coached by an approved 4-H volunteer, and be comprised of 4-H members** who originate from the county where they are enrolled in 4-H **programming**, or originate from the school **where they are formally enrolled**.
6. Area teams and individuals must be certified by the Extension person representing the area on the State Ag. Judging Committee, in order to be eligible for the state contest.
7. In determining the correct Extension area for FFA teams or 4-H teams originating from a school, the location of the administration office of the school corporation will determine the area in which the team will judge.

B. Number of Team Members

1. In all judging contests, a team will consist of three or four members. The highest three scores will make up the team score. The team member with the fourth or lowest score will be considered the alternate member.

C. Number of Teams From Area to State Contest

Contest	Senior Teams	Junior Teams*	Cost/Contestant
Crops	6	2	\$7
Dairy Cattle	5 for 15 teams or less 6 for 16-18 teams 7 for 19-21 teams 1 more for each 3	-	\$12
Entomology	6	2	\$7
Forestry	6	2	\$7
Horse & Pony	4	2	\$12
Livestock	5	-	\$12
Soils	6**	2	\$12

* The state Junior contests are not divided (4-H/FFA). Therefore, only two teams advance to the state contest. Rule C2 (below) does not apply.

**The top 6 “Non-Masters” teams from each area contest, plus any “Masters” teams who place in the top 6 overall at the area contest.

Invitational Contests

Any team who wants to compete in these contests is welcome to attend the state contest.

Contest	Cost/Contestant	Contest	Cost/Contestant
Dairy Foods	\$7	Poultry	\$10
Horticulture	\$7	Skill-A-Thon	\$10
Meat	\$12	Wildlife Habitat	\$12

1. Each team representing an area must have participated in their respective area judging contest by having fully completed the judging of all classes.
2. If an area contest included both 4-H and FFA teams, but both divisions were not represented by the teams qualifying for the state contest, the area chairperson may add an additional state qualifying team to represent the missing division (4-H or FFA).
3. For State Dairy Goat, Dairy Foods, Horticulture, Meat, Poultry and Skill-a-thon judging contests, the state events are invitational for both juniors and seniors. Hence, each county/school is not limited on the number of teams and/or individuals that may participate.
4. **For Horse and Pony, there is a senior event and a junior event. Only juniors can judge in the junior event and only seniors can judge in the senior event.**
5. A Junior FFA team that competes at the area contest and qualifies for State in a CDE that does not offer a junior division at State, would compete in the FFA division at the State Contest.

D. Contestants' Grade in School

1. Youth may become 4-H members when they enter the third grade. They may continue membership through grade 12, with a maximum of ten years participation. Those 4-H members in the 8th grade and below, regardless of 4-H or FFA membership, will judge as juniors. Those in 9th grade and above, regardless of 4-H or FFA membership, will judge as seniors. **If a junior 4-H member chooses to join a “senior” 4-H team, the junior will judge under senior 4-H age criteria for the respective event (except in Horse and Pony judging, where juniors are not allowed to judge on senior teams).** Grade in school will be determined as of Sept. 1 for the academic school year of the judging event. For judging purposes, the academic school year is from September 1 through August 31.
2. Contestants in Senior FFA must be enrolled in a vocational agriculture program in grades 9 through 12.
3. FFA members cannot participate in any county, area, or state contest after September 1 following high school graduation.
4. 4-H or FFA members who have participated in any formal post-secondary training in judging **are not eligible** for area or state Ag judging events.

5. For national and invitational contests, participants must have passed their 14th birthday and must not have passed their 19th birthday prior to January 1st of the current year.

Note: The National Horticulture Event requires a minimum age of 15. Therefore, in some situations, the state committee may have to go to the second or third place team before an eligible team, on the basis of age, is obtained to represent Indiana at the national event.

E. Individual Certification

1. The top five participants in the junior and senior categories at the area contest may participate as individuals at the state contest, as long as the state contest offers a junior division. For those state contests that only offer a senior division, only the top five individuals (from the junior and senior divisions combined at the area level) from each area contest will qualify for the state contest, in addition to the state qualifying teams.
2. If the senior division of an area event includes both 4-H and FFA contestants, the area may be represented at the state contest by the highest placing FFA individual, plus the highest placing 4-H individual, plus three additional individuals from either division, based upon the highest overall scores.
3. If there is a junior division at the state contest, then the top five junior individuals from each area contest may participate at the state contest, regardless of whether the top five individuals includes both 4-H and FFA members.

F. State Certification and Notification

1. All registration forms for state level events must be submitted to the State 4-H Office. (SEND REGISTERED OR CERTIFIED MAIL)
2. Any changes or corrections concerning entries, team designation, or the name or age of a contestant should be reported to the contest superintendent at check-in time for the state event.

G. Number of Events a Contestant May Enter

1. A contestant may compete in only one event at the state level on a given day.
2. Only those teams or individuals certified by the area chairperson will be allowed to participate in the state judging events.

H. Previous Winning Teams or Individual's Eligibility

1. Division is defined as either 4-H or FFA.
2. Contests are defined as Crops, Dairy, Dairy Foods, Dairy Goats, Entomology, Forestry, Horse and Pony, Horticulture, Livestock, Meat, Poultry and Eggs, Soils, or Wildlife Habitat.
3. Senior individuals (not on teams) and all junior contestants may return in the same contest and/or division in subsequent years, regardless of their placing in the state contest.
4. If an individual has previously attended the State Fair sponsored Washington, D.C., trip, that person would not be eligible to take the trip a second time. The next individual in line would be awarded the trip.

5. Any contestant (excluding those on 4-H and FFA Soils teams) who has represented Indiana at the National Contest or has received state sponsored donor monies is ineligible to compete again on a team in the same division of that same contest at the county, area or state level, but may compete in the other division (4-H or FFA) in future years. These individuals may also compete in the other 4-H/FFA judging contests available in their area.
6. The following rules apply to previous winning soils judging individuals and teams:
 - An individual (4-H or FFA) who has participated in the National Land Judging contest will be designated as a “master soil judge”.
 - Any team with a “master soil judge” will be designated a “master soil judging team”. The team will retain the “master team” designation for the entire judging season, no matter what individuals are substituted on or off of the team.
 - Masters teams can compete in the same division (4-H or FFA) more than one time.
 - ****ALL masters’ teams are ineligible for the National Land Judging Contest in Oklahoma City, Oklahoma.**
 - The 6 highest placing non masters teams in each area move onto the state contest, plus any masters teams in the top 6 overall at the area contest.
7. Members of state winning teams may return in the same division of the same contest at county, area and state in future years, so long as they do not attend the “National” contest for that subject matter and do not receive state donor money.
8. Members of state winning teams will have a standing invitation to compete **as individuals** in the same division of the same contest at future state judging events, provided they meet the grade requirements for their respective division. These individuals will not be required to qualify at area contests but they must be entered for state competition through the area chairperson.
9. If the alternate contestant on a state 4-H or FFA team does not judge at the national 4-H or FFA event, that individual may repeat in the same division of that state event in subsequent years, provided the contestant meets all other event requirements.
10. In those categories where there is not a recognized national event, previous winning teams may return for competition provided the contestants meet all other event requirements.

I. Substitutions

1. Each area event chairperson shall designate and certify a first alternate team in each appropriate event.
2. If any certified team notifies the State 4-H Office that they do not intend to participate in the state event (at least three working days prior to the state contest), the alternate team will be notified of their eligibility to enter the state competition.
3. Each team may substitute one member from the area contest to the state contest and one additional member from the state contest to the national contest.
4. Substitutes must meet all other state guidelines including being from the same local organization.
5. Substitutes may or may not have competed in the county or area event.

J. Practice Judging

1. Judging for practice will not be allowed in any state event.
2. All coaches shall refrain from practice judging where the same animals will be used for an event. Disqualification by the event chairperson may result.
3. Soils coaches will also refrain from practice judging on the farm where the event will be held as disqualification may result.

K. Rule Interpretations

1. The event chairperson and the grievance committee have authority to make last minute decisions regarding registration, eligibility, and rule interpretations.

L. Disqualification's

1. Falsifying information and/or attempting illegal return of a team and/or individual contestant, will result in a letter of reprimand being sent to each coach's respective school administration or Extension Educator by the event chairperson. A coach found guilty of violating this rule before advancing to the next contest level, shall have his/her team and/or individuals disqualified. If rule violation is found after an event, the coach shall be suspended from that respective event for one year.
2. Talking or receiving help from any source during an event is forbidden. The event chairperson may disqualify any participant violating this rule.
3. Incorrectly or incompletely marked, or missing scoring sheets will result in a zero score.
4. Livestock owned by Purdue University, or housed on Purdue property is strictly off limits to all coaches and contestants for two weeks prior to the state event. Contest officials and all livestock donors for state events are likewise off limits for the same period of time. Infractions of these rules shall result in disqualification.
5. When a contestant is observed talking, referring to notes of any kind or receiving help from any source during an event, the following procedures will be enforced:
 - a. Contestant to Contestant
 - 1) 1st offense noticed by group leader - the participant(s) will receive a verbal warning from the group leader. The group leader will ask the participant to show their participant number. The group leader will duly note such number.
 - 2) 2nd offense - the participant(s) will receive a zero (0) score on the class. The group leader will notify the event chairperson. The chairperson will score the class as zero and sign the participant's card.
 - 3) 3rd offense - the participant is disqualified from the contest by the chairperson.
 - b. Contestant to Coach (or vice versa)
 - 1) 1st offense - the participant and coach will receive a verbal warning from the group leader. The group leader will ask the participant for his/her number.
 - 2) 2nd offense - same as above in a. 2.
 - 3) 3rd offense involving coach - the coach and his/her team are disqualified from the contest by the chairperson.

Following the judging event, group leaders are to confer regarding warnings given to any contestants and/or coaches for rule violations. If any contestant/coach has received multiple warnings from group leaders, the above policy will hold, i.e., the class where the second warning was issued will be scored zero. The third warning will result in disqualification.

M. Late or Early Teams

1. No team will be permitted to judge earlier than the starting time indicated.
2. Teams arriving after the event has begun may not be allowed to participate in that event at the discretion of the chairperson and/or grievance committee.
3. The event chairperson shall determine the official starting time.

N. Ties

1. Any ties will be broken by the method listed under each event category.

O. Other Groups' Eligibility

1. Youth groups (other than 4-H and FFA) may participate in the state judging events by:
 - a. petitioning the state judging committee chairperson for permission to participate.
 - b. being certified as a winning team in an area event.

P. Protest Procedures for Contests

1. Protests not settled by the event chairperson must be processed in the following manner:
 - a. All protests must be submitted in writing within one week following the event and accompanied by \$25.00.
 - b. If the protest is upheld, the fee will be returned. If the protest is not upheld, the State 4-H/FFA Ag Judging Committee will retain the \$25.00 to help cover operating expenses.
2. All protests related to area contests will be acted upon by the area grievance committee. Protest decisions from the area grievance committee are final and may not be appealed to the state grievance committee.
3. All protests related to state contests will be acted upon by the state grievance committee. The state grievance committee will consist of the chairperson and secretary of the State 4-H/FFA Ag Committee, two vocational agricultural teachers and two Extension Educators (appointed by the chairperson of the State Ag. Judging Committee).

Q. Awards (in all state events except Soils, and Wildlife Habitat Evaluation)

1. The top five 4-H teams, the top five FFA teams, and the top five combined junior teams (in those state contest with a "Junior" division) will each be awarded a team plaque. Each of these team members and the coach will be awarded a team ribbon with the designated placing inscribed.
2. The top 3 to 6 teams in each division of the dairy, horse and pony, and livestock judging contests will be given the opportunity to represent Indiana in national competition. The coach of these teams will be given the opportunity to choose which national contest their team will attend, in the order of their team's ranking in the state

contest. For instance, the coach of the 1st place team will be given the first choice of the national contests, the coach of the second place team will choose second, etc.

3. The top five 4-H individuals, top five FFA individuals, and the top five combined junior individuals in each event, overall, (in those state contests with a "Junior" division), will be awarded a plaque. Individuals six through ten will be awarded ribbons with placing designations.
4. Additional awards may be given as determined and obtained by the event chairperson.
5. One expense paid trip will be awarded annually to each of the highest placing individuals in crops, dairy, entomology, forestry, horse and pony, horticulture, poultry and eggs, livestock, meat, dairy foods, dairy goats, and soils judging events. This annual trip is provided by the Indiana State Fair Board as a four-day educational trip to Washington, D.C. The trip will be conducted and chaperoned through the State 4-H Youth Department at Purdue University.
6. Soils awards are itemized with the Soils information in this publication.
7. Wildlife Habitat Evaluation awards - Team plaques are presented to the top five 4-H teams and the top five FFA teams. No individual ribbons or plaques are presented.

R. Selection of Judges

Final selection of state event judges rests with the Extension Specialist in charge. In each appropriate event, the top ten coaches will be challenged annually to compile a list of 20 or more qualified candidates from which the event chairperson might select official judges for the following year's state event.

S. Terms and Conditions Violations

Violations of stated terms and conditions will be enforced at the point where documented evidence justifies such action. Contestant(s) may be disqualified, awards stripped, and/or the coach(es) reprimanded. Subsequently, awards will be given to the appropriate individual(s) and/or team(s). Full opportunity for due process will be incorporated into action where violations are noted.

T. Group Leaders

1. Group Leaders shall be individuals not affiliated with any contestant.
2. Group Leaders shall attend an orientation meeting with the event chairperson prior to the event to learn their responsibilities, authority and procedures for dealing with potential problems.

U. Contest Results

1. Printed results will be duplicated, and when possible, made available to all coaches at the end of the event.
2. Printed results will be mailed to those coaches not present at the awards presentation.

V. Code of Ethics for Contestants, Coaches, Staff/Adults

- The use of alcohol, "tobacco like" products, or illegal drugs, by contestants at a contest site will be cause for immediate disqualification. Disqualification at a county or area contest will not result in an automatic disqualification from future contests.
- The use of alcohol, "tobacco like" products, or illegal drugs will not be condoned under any circumstance, while in the presence of youth at a 4-H/FFA judging event.

TABLE OF PROGRESSION

A. County Event

1. County rules may be structured to provide for flexibility and unique county needs, but final selection of the representatives (winners) to the area must qualify under area rules.
2. Supervised by a county committee of Extension Educators and coaches.

B. Area Event

1. Area rules may be developed to provide for flexibility and unique area needs, but final selection of the representatives (winners) to the state contest must qualify under the state guidelines.
2. Supervised by an area meeting of Extension Educators and coaches who plan and develop the event.

C. State Event

1. State guidelines are published in 4-H 98, the 4-H/FFA Ag Judging Handbook.
2. Supervised by the State 4-H/FFA Ag Judging Committee.

D. National Event

1. National rules are written for each individual event, and are unique to that particular event and are supervised by a national event committee.
2. An individual may enter a national 4-H competitive event in a specific program area only once, except in the case of exhibits. Participating members of a team entry are ineligible to enter the same event again as a part of another team.
3. The minimum requirements for eligibility to enter a national 4-H competitive event are:
 - a. All contestants must have passed their 14th birthday and must not have passed their 19th birthday prior to January 1 of the current year.
 - b. The contestant must be a member of 4-H during the current year.
 - c. The contestant(s) or team of contestants must be certified as the official state entry by the State Extension Director or by a person designated by the Director. The individual(s) or team may be selected by any procedure, which a state considers appropriate.
 - d. Contestants in national 4-H competitive events must not have participated in official post secondary (university, college, junior college, or technical school) competitive events of a similar nature in the same subject matter area to be eligible for participation in National 4-H Competitive Events. Neither can he/she be a member of a post secondary team undergoing training in preparation for an event.
4. In the event no 4-H team can be fielded for the national contest from the teams that placed at the respective state contest, the state extension specialist in charge of the state judging contest can put together an all state team of individuals so that Indiana can have representation at a National Contest. This is ONLY to be used when no Indiana representative can be fielded for the national judging contest from the teams who attended the respective state contest in that year.

Career Development Opportunities Beyond Indiana

Note: Coaches must designate a preference on respective national events within one week following close of the state event or be expected to participate as follows:

(Note - Registration is to be handled by the coach.)

		<u>Approx. Date</u>	<u>Entries Due</u>	<u>Sponsored Funds</u>	<u>Contact Person</u>
A.	<u>Crops Contest</u>				
1st	National FFA Convention	4th week	August 15		Steve Hickey
FFA	National Agronomy CDE Louisville, KY	in October			(317) 407-7926
B.	<u>Dairy Contests</u>				
4-H & FFA	World Dairy Expo Coliseum Madison, WI www.world-dairy-expo.com	Sept 28	Sept. 15	Yes \$600 by State Fair	
FFA	National FFA Convention Dairy Judging CDE Indiana State Fairgrounds Indianapolis, IN www.ffa.org	Oct. 19 th & 20 th	July 8	Yes \$400 by State Fair	Steve Hickey (317) 407-7926
4-H & FFA	All-American Dairy Show Farm Show Building Harrisburg, PA aads@state.pa.us	September 19	Sept. 1	No	Judy Black Superintendent (717) 787-2905
4-H & FFA	North American International Livestock Exposition Louisville, KY www.livestockexpo.org	Nov. 6	Oct. 1	No	George Heersche, Superintendent (606) 257-5987
C.	<u>Dairy Quiz Bowl</u>				
	North American International Livestock Exposition State Fair Grounds Louisville, KY www.kyfairexpo.org/livestock	Nov. 4	Oct. 1	No	George Heersche Superintendent (606) 257-5987
D.	<u>Dairy Foods Judging Contests</u>				
1st	World Dairy Expo	1st week in	Aug. 15	Yes	Carl Broady
4-H	National 4-H Dairy Conference Madison, WI www.world-dairy-expo.com	October		\$500 by Milk Promotion Services of Indiana	(765) 494-8435

		<u>Approx. Date</u>	<u>Entries Due</u>	<u>State Sponsored Funds</u>	<u>Contact Person</u>
G.	<u>Horticulture Contest</u>				
1st 4-H/ FFA	N.J.H.A. Contest Location changes annually.	Last weekend in Oct.	12 noon day prior to contest	Yes* \$600 each yr. by State Fair	William Wilder, host (219) 244-6136 Ext. 205

* To one 4-H team and one FFA team through state N.J.H.A. delegation trip.

H. Livestock Contests

4-H	North American International Livestock Exposition National 4-H Livestock Contest Louisville, KY www.livestockexpo.org	Nov. 17	Oct. 1	Yes \$700 by Ind. Farm Bureau, Inc.	
FFA	National FFA Convention National Livestock CDE State Fairgrounds Louisville, KY www.ffa.org	Oct. 21 st & 22 nd	July 1	Yes \$600 by Ind. Farm Bureau, Inc.	Jessica Scholer (317) 802-4263 jscholer@ffa.org
4-H/FFA	American Royal Livestock Show 4-H /FFA Livestock Judging Contest Kansas City, MO www.americanroyal.com	Nov. 1 st	Sept 1	No	Kevin Heikes (913) 220-4375 kevin.e.heikes@gmail.com
4-H/FFA	National Western Stock Show 4-H/FFA Livestock Contest Denver, Colorado www.nationalwestern.com	Jan.9	Dec. 1st	No	Shane Bedwell (970) 491-8093 shane.bedwell@colostate.edu
4-H/FFA	Keystone International Livestock Exposition Harrisburg, Pennsylvania www.agriculture.state.pa.us/kile/site	Oct. 3	Sept. 21 st	No	Bob Mikesell, Supt. (814) 865-2987 rem9@psu.edu
4-H/FFA	Eastern National Livestock Exposition Timonium, MD	Sept 15	Sept. 8	No	Debbie Nelson4-H44- (410) 838-1193
2 4-H 2 FFA	Southeastern Regional Livestock Judging Contest Rocky Mount, NC	Oct. 31st	Oct. 1	No	Brent Jennings (919) 515-4467 brent_jennings@ncsu.edu

		<u>Approx. Date</u>	<u>Entries Due</u>	<u>State Sponsored Funds</u>	<u>Contact Person</u>
I. <u>Meat Contests</u>					
4-H	American Royal 4-H Meat Judging Contest Kansas State University Manhattan, KS www.americanroyal.com	Oct. 14 th	Mid Sept	Yes \$600 by State Fair	Jimmy Wise, Supt. (918) 827-2940 jimmyw@meatscience.org David Shafer, Chr. (913) 532-6131
FFA	National FFA Convention National Meat CDE Louisville, KY	Oct. 27 th & 28 th	July 9	No	Jessica Scholer (317) 802-4263 jscholer@ffa.org
4-H & FFA	National Western Stock Show 4-H/FFA Meat Judging Denver, Colorado www.nationalwestern.com	Jan.8	TBA	No No	Dr. John Scanga (970) 491-6244
J. <u>Poultry Contests</u>					
1st 4-H	North American International Livestock Exposition National 4-H Poultry Contest Louisville, KY www.livestockexpo.org http://national4hpoultryandegg.psu.edu/	Nov. 18	Oct. 18	Yes \$600 by State Fair	Dr. Ken Koelkebeck, Supt. (217) 244-0195 FAX (217) 333-7861 kkoelkeb@illinois.edu
1st FFA	National FFA Convention National Poultry CDE Louisville, KY	Oct. 29	July 9	Yes \$500 by State Fair	Steve Hickey (317) 407-7926
K. <u>Soils Contest</u>					
1-5 4-H/ FFA	International Land Judging Contest International Building State Fair Grounds Oklahoma City, OK 73114 www.landjudging.com/	1st week in May	April 1	Partial	Charles Cox, host (405) 744-5390
L. <u>Wildlife Habitat Evaluation</u>					
1 st 4-H	National 4-H Wildlife Habitat Evaluation Contest	late July/ early Aug	June 1 (approx.)	No	www.whep.org/
1 st FFA	National FFA Convention Environmental & Natural Resources Management CDE	Oct			Steve Hickey (317) 407-7926

For additional information and/or assistance, please contact:

4-H Teams

Dr. Colleen Brady
Youth Development and Ag Education
AGAD Building, Purdue University
615 West State Street
West Lafayette, IN 47907-2053
(765) 494-8439
bradyc@purdue.edu

FFA Teams

Steve Hickey
Director of Leadership Programs for FFA/IYFA
Indiana State Department Agriculture
1 North Capitol, Suite 600
Indianapolis, IN 46204
317-407-7926
shickey@isda.in.gov

Registration Fees*

All coaches with individuals and/or teams eligible for the following State Judging Events must make a complete payment to Purdue University - Judging Account on the day of the event at the respective registration table. Fees are as follows:

Soils	Registration includes meal	\$12 per contestant
Crops	Registration only	\$ 7 per contestant
Entomology	Registration only	\$ 7 per contestant
Forestry	Registration only	\$ 7 per contestant
Wildlife Habitat	Registration includes meal	\$12 per contestant
Horse & Pony	Registration includes meal	\$12 per contestant
Dairy	Registration includes meal	\$12 per contestant
Livestock	Registration includes meal	\$12 per contestant

Coaches with individuals and/or teams desiring to participate in any of the following State Judging events must send complete payment to Purdue University - Judging Account along with the registration form.

Skill-a-Thon	Registration Only	\$10 per contestant
Dairy Foods	Registration only	\$ 7 per contestant
Meat	Registration includes meal	\$12 per contestant
Poultry & Egg	Registration only	\$10 per contestant
Horticulture	Registration Only	\$10 per contestant

Receipts will be available to all who desire written documentation for payment of registration fees.

Registration fees are non-refundable. Coaches are expected to pay for the number of contestants they enter. Coaches who do not pay for all entries will receive a statement of amount due from the State 4-H Office, and will need to clear their account before entering another team in a State Judging Event.

*The Indiana State Fair Board has provided \$3,000 annually to help offset costs of operating the state events and to help reduce the registration fees. The annual budget exceeds \$16,000 for the 14 State 4-H/FFA judging contests.

FOR YOUR INFORMATION

Immediately following the area event:

1. The Extension 4-H/FFA Ag Judging Area Chairperson should (within 24 hours following the area contest), duplicate the signed, original registration forms and forward these originals for all eligible area teams and individuals to the State 4-H Office., AGAD Building, Purdue University, 615 West State Street, West Lafayette, IN 47907-2053. Retain one duplicate copy for the coach and one for the area records.

CROPS
(Agronomy Skills Development)

The following information is pertinent to the Indiana 4-H Crops /FFA Agronomy Career Development Event in Indiana.

- Each of the 10 extension areas will receive 2 complete crop kits with a complete selection of identification samples. One kit is shared with all counties within the extension area the other is held for area contest purposes only. The extension educator coordinating the area crops event will need to contact Dr. Tom Housley at (765) 494-4792 or by e-mail: (housley@purdue.edu) to inform him of the event's coordinator, date, & location such that the grain grading and exam portions of the contest can be supplied.
- The Crops Skill Manual, updated in 2005, can be found at <http://www.indianaffa.org/crops%20manual%202005-2010.pdf>.
- Reference booklet ID-179 "Corn & Soybean Field Guide" is available from Purdue Media Distribution Center.

Contest Content Coordinator: Dr. Tom Housley, Dept. of Agronomy
4-H Contest Administration: Dr. Kathryn Orvis (765) 494-8439

General Rules

- The outline of the event and all rules included herein are official for the area and state events. There are two levels of participation as junior or senior. **The junior event only differs from the senior event in grain grading materials (not samples).**

- The following point values are assigned to each section (each section lasts 60 minutes):

Section I	Identification – 60 samples worth 10 points each. Scored as: 6 pts correct answer, 2 pts spelling, and 2 pts capitalization 25 Plant samples 25 Seed samples 10 Insects/Diseases/Disorders/Damages samples	600
Section II	Exam - 40 multiple-choice questions worth 5 points each.	200
Section III	Grain Analysis – 8 samples worth 25 points each. 4 Corn samples 2 Soybean samples 2 Wheat samples	200
Total Possible Score		1000

Ties will be broken in the following order: Identification, Grain Analysis, and finally Exam

- Participants may use clipboards and/or magnifying glass. Also ID 179, Corn and Soybean Field Guide may be used during the Agronomy Exam ONLY. No other information, except for section markers, will be allowed within ID-179 during the event.
- No communication with other participants, or with anyone other than the official in charge, will be permitted during the event.

The crops/agronomy contest is divided into three parts:

1. Identification

- Samples to be used in the contest will be the same for the junior and senior division.

2. Grain Analysis

- Procedures for the junior grain grading part of this section will be like that of the senior contest, except that grading information of corn, soybeans, and wheat will be provided for the contestant's.
- The grain grading scoring is currently under revision and will be in the new edition of the Agronomy Skills Manual once completed and supplied as a supplement to this handbook.

3. Exam

- The exam will be the same for both junior and senior contests.
- The test questions will be constructed from the instructional objectives listed. The suggested references and objectives follow that will be helpful in preparing for this section of the event.
- Contestants are encouraged to use a copy of the latest edition of ID 179, Corn and Soybean Field Guide, to answer questions on the exam. These may not have any writing of any form other than the owner's name or index tabs. Anyone caught with a booklet containing writing on any page will have their answer sheet removed and receive no score for this portion of the contest!

Instructional Objectives

To successfully complete the portion of the multiple choice exam pertaining to corn, soybean and wheat production and general agronomic knowledge; the participant should be able to:

1. Assess fertility needs and make nutrient recommendations for corn and soybeans using tables.
2. Calculate fertilizer needs and costs to satisfy a specific nutrient requirement.
3. Diagnose fertility, pest compaction, and disease problems related to specific field situations.
4. Calculate insecticide and herbicide needs for a specific field situation.
5. Calculate area, length and volume measurements related to agriculture.
6. Explain how crop residue is measured by the Natural Resources Conservation Service (NRCS) and why crop residue is measured after planting.
7. Recognize methods to achieve crop residue percentages required to meet conservation compliance on highly erodible land for corn and soybeans rotations.
8. Identify the herbicide mode of action group most likely responsible for specific herbicide injury symptoms.
9. State a procedure for diagnosing crop production problems in a field.
10. Recommend nozzle tips that would be best suited for spraying in a specific field situation.
11. Determine the growth stage of a corn or soybean plant.
12. Define a soybean relative maturity group and predict what would happen if a variety is planted outside its recommended maturity range (e.g. move group II to southern Indiana).
13. Explain the effect and use of temperature developmental units for agriculture.
14. Use current weather information to calculate growing degree days
15. Consult tables and charts to obtain information from reference materials.

16. Use corn and soybean moisture conversions to calculate actual pounds per bushel.
17. Define the cation exchange capacity of a soil and state the two factors that influence the cation exchange capacity of a soil.
18. Complete the process necessary to submit plant, soil or insect samples to a lab in order to reduce sampling error (often the largest source of error).
19. Contrast features of conventional versus reduced tillage systems related to temperature, moisture, and soil erosion.
20. Describe what the user of any herbicide should find on a label of the product.
21. List varietal characteristics important in wheat variety selection.
22. Schedule a nitrogen fertility program for optimum wheat production.
23. Use table and soil test information to determine nitrogen, phosphorous, and potassium needs.
24. Schedule a fertility program for double-cropping no-till soybeans following wheat.
25. State factors that affect the planting date of wheat.
26. List conditions when it is appropriate to plant seed from your own bid.
27. Suggest the proper seeding depth and soil conditions for ideal wheat growth.
28. State the typical seeding rate and plant population of soft red winter wheat.
29. State two conditions that lead to lodging (falling over) of wheat.

To successfully complete the portion of the multiple choice test related to forages, the participant should be able to:

- B. List 3 reasons a pure stand is advantageous over a mixed stand.
- C. List 5 reasons a mixture is advantageous over a pure stand.
- D. Contrast the suitability of Alfalfa, Timothy, Smooth brome grass, and Orchardgrass to a 3 vs. 4 cutting system.
- E. Contrast the suitability of Alsike clover, Red clover, Alfalfa, Reed canarygrass, Tall fescue, Orchardgrass, and Smooth brome grass to various levels of soil drainage and fertility.
- F. State the benefits of legume-renovated pastures.
- G. Describe the common problems encountered when renovating pastures.
- H. State the steps required to achieve successful pasture renovation.
- I. Describe the effect of improper liming, phosphorous and potassium fertilization in Alfalfa.
- J. Determine factors that lead to heaving of tap rooted plants such as Alfalfa.
- K. Identify alfalfa weevil, potato leaf hopper, grass hoppers, anthracnose, phytophthora root rot, fusarium wilt and bacterial wilt.

In order to complete the portion of the multiple choice test pertaining to plant physiology, the participant will be able to:

1. Differentiate the three (3) major components: pericarp, endosperm, and embryo in a grass caryopsis (grain kernel).
2. Distinguish between hypogeal and epigeal emergence.
3. Determine difference in root systems, stems and leaf structures between dicot and monocot plants.
4. Compare and contrast specialized stems such as rhizomes, tubers, stolons, corms, bulbs, culms and stalks in growth location and physical appearance.
5. Label a diagram of the external features of a Red clover, Alfalfa, and grass leaf.
6. Label the parts of a basic flower, a legume flower, and a grass flower.
7. Differentiate among the spike, raceme, panicle, and head types of inflorescence.

In order to complete the portion of the multiple choice test related to grain grading the participant will be able to:

1. State the top 3 grain crops and their quantity that Indiana contributes to the market place.
2. Recognize the usual grade of market quotes and where market quotes may be obtained.
3. List the grains for which standards have been established.
4. Explain procedures used in determining grades for corn, soybeans and wheat.

Reference Materials for Crop Events

1. Corn Kernel Damage #216, Soybean Kernel Damage #215, and Wheat Kernel Damage #213. These three publications detail disease and damage with pictures and descriptions.

Contact: Extension Agricultural Economics
 Oklahoma State University
 Phone: (405)744-6082

2. Corn and Soybean Field Guide ID-179
3. Wheat Production and Fertilization in Indiana AY-224
4. Forage Selection and Seeding Guide for Indiana AY-253
5. Improving Pastures by Renovation AY-251
6. Estimating Crop Residue Cover AY-269

#2-6 Contact: Purdue University Cooperative Extension Service
 Agricultural Media Distribution Center
 Phone: 1-888-398-4636 (option #2)

7. Alfalfa analyst
 Contact: Certified Alfalfa Seed Council
 Phone: (530)752-0572

8. Corn Insects – Above Ground
 Corn Insects – Below Ground
 Soybean Insects

Corn Diseases 1-5
Alfalfa Diseases 1 & 2
Wheat Diseases 1 & 2
Corn Herbicide Injury 1 & 2
Soybean Herbicide Injury 1 & 2

Contact: University of Illinois
1-800-345-6087

9. United State Department of Agriculture, Federal Grain Inspection Service. The Official Grain Standards of the United States.
10. Seeds and plant mounts my be ordered from the Purdue University Agronomy club by calling Sherry Fulk-Bringman at (765)494-4773.

DAIRY CATTLE JUDGING

A. Dairy suggestions for county/area event:

1. Select and schedule the judge or judges as soon as possible. Preference should be given to judges who have previously handled events. Please include in your contact a suggested payment to defray their expenses.
2. Be sure you have verification in writing from the judge(s) that he/she has accepted the assignment.
3. Select and contact the dairy farm(s). Be sure farms have enough cow numbers to allow for selection of good classes. Since oral reasons will be required on four cow classes in the state contest, it is recommended that at least two or three classes of written or oral reasons be used in area contests.
4. Two weeks before the contest, send a reminder notice to judge(s) concerning location and time to meet.

B. State Event

1. Participants in the State Event will judge 6 - 8 classes of lactating dairy cows and dairy heifers. Oral reasons will be given on four of the classes of lactating cows. Two or three classes of older cows and one or two classes of younger cows will be used for the reasons classes.
2. Each participant will be given 15 minutes to place and take notes on each class in the state event.
3. Each participant will be allowed two minutes to give each set of oral reasons. Notes cannot be used while giving oral reasons.
4. Animals will be designated by number: 1-2-3-4.
5. Fifty points will constitute a perfect score on a placing class and on a set of oral reasons.
6. The overall team ranking will be determined by totaling all scores of the top three team members. All four team members will be eligible for individual awards.
7. Ties (based on the three highest contestants' scores that went into making the tie) will be broken by the following criteria for each division:
 - (a) **Individual rank** - If two or more contestants have the same total points score, it will be broken by total reasons score.
 - (b) **Team rank** - If two or more teams have a combined total score that is the same, the tie will be broken by a combined total reasons score.
 - (c) If still tied for either Individual and/or team rank, the contestant or team having the highest placing score in the class(es) with the lowest total cuts, will be listed first.
 - (d) If still tied, the contestant or team with the highest total placing score (adding together the placing scores on reasons classes) on reasons classes, will be listed first.
 - (e) If still tied, the contestant or team with the highest single class reason score will be listed first.

- (f) Ties for individuals and teams in the oral reasons category will be broken such that the contestant or team with the lower total placing score (adding together the placing scores on reasons classes) on reasons classes, will be listed first.

If all of the above fail, duplicate awards shall be given.

8. Group Leaders. A group leader shall be in charge of each group to move the contestants, to assist in supervising the class, to see that the animals are properly exhibited, and to answer any questions, which may not pertain to the actual placing of the animals under consideration.
9. Nearby school students and interested volunteers unaffiliated with the dairy contestants will be selected as leadsmen for the 20 animals exhibited in the state event. If sufficient holders are not present for a class, the animals will be judged in stanchions.

C. All Indiana 4-H Team

Following the state dairy judging contest, an "all Indiana" 4-H team will be formed to compete at the dairy judging contest in Louisville, KY. The top twenty 4-H individuals in the state dairy judging contest (who are not a member of one of the top three 4-H dairy teams at the state contest) will be invited to dairy judging practices in the summer and at the Indiana State Fair to form a state dairy judging team that will represent Indiana at the North American International Livestock Exposition. 4-H members qualifying for this team must be at least 14 years of age in order to meet national contest age requirements.

4-H members trying out for the "all Indiana" 4-H team are required to attend one of the three dairy judging workshops held during the summer. One practice will be held in northern Indiana, one in the central part of the state, and one in the south. A final required workout will be held at the Indiana State Fair. Four individuals and one alternate will be selected by the coach to make up the "all Indiana" team that will represent Indiana at the North American in Louisville, KY. In addition, the top three teams from the state dairy judging contest will be invited to these workouts.

In the event that the 1st place 4-H dairy judging team at the state contest is not eligible to compete at the National Dairy Judging Contest in Madison, WI, then the coach of the "all-Indiana" team would be next in line to select the national contest of his/her choice for the "all Indiana" team to attend that year. If an individual on the state winning team (that has passed up the opportunity to represent Indiana at the National 4-H Contest in Madison, WI) is in their last year of eligibility, they will be invited to try out for the "all Indiana" team for an opportunity to compete at the National Contest, if the coach of the "all Indiana" team chooses to take the "all Indiana" team to the National Contest.

The Purdue University Dairy Judging Coach will serve as the coach of the "all Indiana" team and will be assisted by a person(s) of his/her choice. Other 4-H dairy coaches will also volunteer their time and effort in getting 4-H members to workouts and assist with the program.

D. Suitable References:

1. Techniques in Judging Dairy Cattle, available from: Dennis Hartman, 2709 Mt. Vernon Lane, Blacksburg, Virginia 24060 (costs \$3.25).
2. Hoard's Dairyman Judging Guide, available from: Hoard's Dairyman, Fort Atkinson, WI 53538 (cost \$1.00 plus \$.70 postage)
3. Dairyman's DHI Manual, available from herds on test or Bob Jones, 208 Poultry Building, Purdue University, West Lafayette, IN 47907
4. Dairy Cattle Judging Techniques by G. W. Trimberger and W. M. Etger, available from bookstores serving Purdue students or Prentice-Hall, Inc., Englewood Cliffs, New Jersey (costs \$24.95).
5. Dairy Cattle and Dairy Goat Evaluation and Judging, Oregon State University, 4-H 709. Available from Purdue Mailing room through the County Extension Office.

6. Evaluating Dairy Cattle Using Production, Genetic, and Visual Estimates, ID 177, 1988, Purdue University. Available from Purdue Mailing Room through the County Extension Office. Cost \$1.00/copy
7. Teaching 4-H Oral Reasons, EM 4789, Washington State University, 1987. See last four pages in back of this 4-H/FFA Ag. Judging Handbook.
8. "Judging Dairy Cattle" - Video Tape VC--2072 - available from Purdue Film Library, Phone (317) 494-6742) through the County Extension Office.
9. Dairy Cattle Reasons - Video tape - available from Dr. David Dickson, University of Wisconsin, 637 Extension Building, 432 N. Lake Street, Madison, Wisconsin, 53705.

E. Supplemental/Optional Reference Items

- "Judging Dairy Cattle" a color slide set, cassette of oral reasons and a dairy judging manual are available through Vocational Education Productions. Call 1-800-235-4146 for details.
- More emphasis is to be placed on sire selection, pedigree analysis, and DHIA reports along with visual appraisal on a parallel with the format of the National Dairy Contest.

DAIRY FOODS

I. Objectives

Purpose: One of the universal measurements of milk quality is examining its unique flavor characteristic. Through tasting milk, one can determine whether it has been collected under acceptable conditions, has been mishandled, or if it has been improperly stored. Flavor, texture and appearance of dairy products, likewise, can tell one about the quality of their composition and processing conditions. The purpose of this program is to train the individual to judge those product appearances, textures and flavors that reflect some production, processing, or handling condition which has influenced the quality of the finished dairy product. On the other hand, these same characteristics can prove quite helpful in the identification of various cheeses and the evaluation of their respective quality. Thus, the learning objectives for this program are:

1. To learn about the marketing aspects of dairy products;
2. Product identification (cheese);
3. Evaluating and identifying dairy product defects based on flavor, texture and appearance attributes.
4. The familiarizing of the student with processing, handling and storage practices that affect dairy product quality; and
5. To acquaint the student with organolytic techniques in evaluating food.

II. Implementation and Program Schedule

A. State Contest

- a. Registration due: **January 15**
- b. Counties or schools can register more than one team.
- c. Counties and schools can also enter junior teams. Juniors are those individuals that are in 8th grade or below.
- d. A team consists of 4 members with the lowest member score dropped.
- e. Plaques for top teams and top ten individuals ribbons will be awarded.

III. State Contest Classes (Junior and Senior Contest)

A. The contest classes are as follows:

<u>4-H DIVISION</u>		<u>FFA DIVISION</u>	
1. Milk samples	54 pts	1. Milk samples	54 pts
2. Cheese Identification	54 pts	2. Cheese Identification	54 pts
3. Problem Solving Class	54 pts	3. Problem Solving Class	54 pts
4. Ice Cream Samples	54 pts	4a. California Mastitis Test	32 pts
		4b. Milker Unit Heads	36 pts
5a. Questions on the Consumer Aspects of Dairy Products and Marketing	50 pts	5b. Questions on Milk Production and Marketing	50 pts

- a. Contestants will be allowed 2 1/2 hours for the contest.
- b. The score for each contestant is the total number of points for each class added together, after deductions have been made for incorrect answers. Therefore, the higher the score, the higher the rating. Ties for individual awards will be broken by (1) or by (2), if (1) does not break the ties.
 1. The individual having the highest total score, after the quiz score has been omitted, will be declared the winner.
 2. The individual having the highest combined score on milk samples, problem solving and cheese identification will be declared the winner.

B. Class Description

1. **MILK SAMPLES** (Maximum - 54 pts)
 - Six milk samples will be scored on flavor (taste and odor)
 - Use score card 4-H 653 Milk Samples
 - References: 1) 4-H 945 4-H/FFA Dairy Foods Contest Coaches' Guide
2) See Reference list later in the Dairy Foods Section and are all available from the Indiana 4-H Website: www.four-h.purdue.edu.
 - Scoring: -3 pts for each incorrect slight, definite or pronounced assessment
-6 pts for each incorrect defect marked

2. **CHEESE IDENTIFICATION** (Maximum - 54 pts)
 - Nine cheese samples for identification will be selected from the following list:

Asiago	Harvarti
Blue	Monterey (Jack)
Brie/Camembert	Mozzarella/Pizza
Cheddar (mild)	Munster
Cheddar (sharp)	Parmesan
Colby	Processed American
Cream/Neufchatel	Provolone
Edam/Gouda	Romano
Feta	Swiss
 - Use score card 4-H-654 Identification of Cheeses
 - References: 1) 4-H 945 4-H/FFA Dairy Foods Contest Coaches' Guide
2) See Reference list later in the Dairy Foods Section and are all available from the Indiana 4-H Website: www.four-h.purdue.edu.
 - Scoring: -6 pts for each incorrect identification

3. **PROBLEM SOLVING** (Maximum - 54 pts)
 - Use score sheet 4-H 714 Problem Solving
 - Reference: 1) 4-H 945 4-H/FFA Dairy Foods Contest Coaches' Guide
2) See Reference list later in the Dairy Foods Section and are all available from the Indiana 4-H Website: www.four-h.purdue.edu.

Part I

- Six samples for identification as a real or artificial dairy product will be selected from the following list:

CREAMS

coffee cream
non-dairy creamer
condensed milk
filled milk

CULTURED PRODUCTS

yogurt
sour cream
no fat sour cream

TOPPINGS

whipped toppings
whipped cream

DAIRY FROZEN DESSERTS

no fat ice cream
ice cream

CHEESES

cheese
cottage
vegetable cheese

SPREAD

butter
cream
margarine

SPECIALTY

Chocolate
Soy

Part II

- Six questions will be asked related to any of the following topics:
 - Principles of merchandising dairy foods.
 - Factors impacting the demand for and commercial use of milk and dairy foods/products.
 - Nutritional value of dairy foods/products and their role in the diet.
 - Current issues relative to the marketing of milk and dairy foods/products and new developments in dairy foods processing.
- Scoring: -3 pts for each incorrect identification
-3 pts for each incorrect classification
-3 pts for each incorrect question answer

4. ICE CREAM SAMPLES (Maximum - 54 pts)

- Six ice cream samples will be scored on flavor, body and texture
- Use score card 4-H-656 Ice Cream
- Reference: 1) 4-H 945 4-H/FFA Dairy Foods Contest Coaches' Guide
2) See Reference list later in the Dairy Foods Section and are all available from the Indiana 4-H Website: www.four-h.purdue.edu.
- Scoring: -1 pt for each incorrect slight, definite or pronounced flavor, body, and texture defect
-3 pts for each intensity trait that is incorrect

4a. California Mastitis Test (CMT) (Maximum - 32 pts)

- Four CMT samples will be evaluated for abnormality using even numbers from 0 to 8 inclusive. See Scoring Guide for CMT on D100 CMT paper.
- Use score card 4-H-657 California Mastitis Test
- References: 1) D100 California Mastitis Test (CMT) see www.four-h.purdue.edu
2) Using CMT Test published by University of Missouri-Columbia Extension Division, Columbia, MO 65211. See www.four-h.purdue.edu
3) California Mastitis Test can be ordered from NASCO—Toll free 1-800-558-9595 or www.enasco.com
- Scoring: Each sample worth 8 pts each. It will be scored on absolute value of official score minus the student's score on each sample.

4b. MILKER UNIT HEADS (Maximum - 36 points)

- Six milker unit heads will be scored on defects present
- Use score card 4-H-658 MILKER UNITS
- The flexible parts are to be scored as rubber parts, the rigid plastic or glass parts

- are to be scored as metal parts
- Contestants will be permitted to bring and use flashlights when actual units are used
- Scoring: -2 pts for each incorrect defect not identified on the milker unit

5a. 4-H WRITTEN QUESTIONS (Maximum - 50 pts)

- Twenty-five objective questions on the consumer aspects of dairy products
- Twenty-five objective questions on milk marketing
- Scoring: 1 point for each correct answer

5b. FFA WRITTEN QUESTIONS (Maximum - 50 points)

- Twenty-five objective questions on milk production
- Twenty five objective questions on milk marketing
- Scoring: 1 point for each correct answer

References for both 4-H and FFA questions:

- 1) 4-H 945 4-H/FFA Dairy Foods Contest Coaches' Guide (2009) Purdue University
Available on line at: www.four-h.purdue.edu (click on "Search" and type in Dairy Food under the "Download Search" and click search.
- 2) See Reference list later in the Dairy Foods Section and are all available from the Indiana 4-H Website: www.four-h.purdue.edu.

IV. Score Sheets

- 4-H 653 Milk Samples
- 4-H 654 Identification of Cheese
- 4-H 656 Ice Cream
- 4-H 657 California Mastitis Test
- 4-H 658 Milker Units
- "Download Search"
- 4-H 714 Problem Solving

Available from:
Indiana 4-H Website:
www.four-h.purdue.edu
click on "Search" type in
Dairy Food under
and click search

REFERENCE LIST:

Pub No.	Title of Publication on Indiana 4-H Website: www.four-h.purdue.edu	Overall	Coaches	Cheese ID	Ice Cream	Lessons	Milk Evaluation	Milker Parts & CMT	Problem Solving	Tests	Revised Date
4-H 653-W	CDE: Milk Flavor Dairy Foods Scorecard						X				2009
4-H 654-W	CDE: Cheese ID Dairy Food Scorecard			X							2009
4-H 656-W	CDE: Ice Cream Dairy Food Scorecard				X*						2009
4-H 657-W	CDE: CMT & Milker Unit Dairy Food Scorecard							X**			2009
4-H 714-W	CDE: Problem Solving Dairy Food Scorecard								X		2009
4-H-945-W	Dairy Foods Coaches Guide		X			X				X	2009
FB 2259	Dairy Food -Judging Scoring Milk & Cheese	X					X			X	
HGB 255	Dairy Food -How To Buy Dairy Products HGB 255	X					X			X	2007
	Dairy Food -Milk for Manufacturing Purposes	X					X			X	2005
	Dairy Food -Milker Part Photos							X**			2008
	Dairy Food -Nutrient Content of Cheese -Newer Knowledge Series			X						X	2000
	Dairy Food -Using CMT Test, U of Missouri							X		X	2005
	Dairy Food -Kinds of Other Dairy Products -Newer Knowledge Series				X				X	X	2000
	Dairy Food -Kinds of Milk -New Knowledge Series						X			X	2000
	Dairy Food -Kinds of Cheese -Newer Knowledge Series			X						X	2000
	Dairy Food -Ice Cream Facts from IDFA				X*					X	2009
	Dairy Food -Ice Cream & Frozen Products				X*					X	2000
	Dairy Food -Facts about Yogurt, DMI								X	X	2007
	Dairy Food -Facts about Milk, DMI									X	2007
	Dairy Food -Facts about Cheese, DMI			X						X	2007
	Dairy Food -Facts about Butter, DMI								X	X	2007
	Dairy Food -D100 CMT Test Instructions							X**			2009
	Dairy Food -Classification of Cheese -Newer Knowledge Series			X						X	2000
	Hoard's Dairyman, past 12 months									X**	
	X*=4-H Only										
	X**=FFA Only										

ENTOMOLOGY

Purpose

The primary purpose of this event is to increase youth understanding of insects, control measures, and integrated pest management.

The Area Entomology Career Development Event

The Area Entomology Career Development Event is composed of insect identification and quiz questions. Juniors and Seniors will have different quizzes. Questions will be taken from the Resources listed below.

Scoring: 40 specimens – 3 points for each common name and one point for each order for a total of 160 points for the insect identification. Quiz: 20 questions, 2 point each for a total of 40 points. Maximum total points 200.

	<u>Points</u>
Insect Identification (40 specimens)	
common name - 3 points each	120
order - 1 point each	40
Quiz – 20 questions at 2 points each	40
Total	<u>200</u>

All preliminary contests should be conducted in such a manner as to prepare contestants for the state contest. ID 403 (flash cards, see Junior resources) can be used if necessary. Area quizzes will be sent to Area Coordinators in early October. Please try to use Scantron for at least part of the CDE to familiarize youth with them before they reach the State CDE.

The State Entomology Career Development Event

The State Entomology Career Development Event is composed of insect identification and quiz questions. Participants will complete both parts at the same time as they sit at a table and pass Riker mounts. Some Riker boxes will contain insects for identification and some will contain questions.

1. Fifty (50) insect or insect related specimens mounted in individual Riker mounts will be identified both to order and common name. Contestants from both the junior and senior divisions will be required to choose the correct names (multiple choice).
2. Specimens for the state contest will be taken from the list of insects given in this Handbook. Specimens will be adult form.
3. Juniors and Seniors will have different quizzes. Multiple choice and/or true & false questions will be taken from the Resources listed below.
4. Scoring: 3 points for each common name and one point for each order for a total of 150 points for the insect identification. Quiz: 25 questions, 2 points each for a total of 50 points. Maximum total points 300.

	<u>Points</u>
Insect Identification (50 specimens)	
common name - 3 points each	150
order - 1 point each	50
Quiz - 25 questions at 2 points each	50
Total	<u>250</u>

In the event of a tie high score, the tie will be broken by favoring the individual or team having the highest score on the quiz questions. If a tie still exists, the tie will be broken by favoring the individual or team answering a question (or questions) given by the contest coordinator. If a tie is unable to be broken by these methods, then a duplicate award will be given.

Resources

Questions for the Entomology CDE will be taken from the following resources:

Juniors

- [How to Make an Awesome Insect Collection!](#) ID-401 – available at Entomology 4-H and Youth [website](#), or [order](#) hardcopy from The Education Store, <https://mdc.itap.purdue.edu/>.
- Awesome Insect Fact n’ Photo Cards (ID-415) – available at Entomology 4_H and Youth [website](#) or [order](#) hardcopy from The Education Store, <https://mdc.itap.purdue.edu/>.

Seniors

- The Junior resources (see above)
- [Who Let the Bugs Out?](#) ID-402 – available at Entomology 4-H and Youth [website](#). [\(New reference, June, 2010\)](#)

Common names & order

Note: There are 150 insects that youth may be asked to identify. They are listed below by order.

Specimen boxes will contain either the adult stage or both the adult and growing stages, except where noted.

Common Name – Order Name	Common Name – Order Name
1. Alfalfa weevil - Coleoptera	45. Damsel bug - Hemiptera
2. American cockroach - Dictyoptera	46. Damselfly - Odonata
3. Angoumois grain moth - Lepidoptera	47. Deer fly - Diptera
4. Annual cicada - Homoptera	48. Dermestid beetle - Coleoptera
5. Antlion - Neuroptera	49. Differential grasshopper - Orthoptera
6. Aphid - Homoptera	50. Diving beetle – coleoptera
7. Apple maggot fly - Diptera	51. Dobsonfly - Megaloptera
8. Armyworm - Lepidoptera	52. Dragonfly - Odonata
9. Asparagus beetle - Coleoptera	53. Earwig – Dermaptera
10. Assassin bug – Hemiptera	54. Elm leaf beetle - Coleoptera
11. Bagworm - Lepidoptera	55. Emerald ask borer – coleoptera
12. Baldfaced hornet - Hymenoptera	56. European corn borer - Lepidoptera
13. Bean leaf beetle - Coleoptera	57. Field cricket - Orthoptera
14. Bed bug - Hemiptera	58. Firefly – Coleoptera
15. Bird louse - Mallophaga	59. Flea - Siphonaptera
16. Black cutworm - Lepidoptera	60. Fungus Gnat – Diptera
17. Blister beetle - Coleoptera	61. German cockroach - Dictyoptera
18. Blow fly – Diptera	62. Giant water bug - Hemiptera
19. Booklouse – Psocoptera	63. Green June beetle - Coleoptera
20. Boxelder bug - Hemiptera	64. Green lacewing - Neuroptera
21. Brownbanded cockroach - Dictyoptera	65. Ground beetle - Coleoptera
22. Brown lacewing - Neuroptera	66. Gypsy moth – Lepidoptera
23. Bumble Bee - Hymenoptera	67. Hackberry psyllid - Homoptera
24. Cabbage butterfly - Lepidoptera	68. Head louse - Anoplura
25. Cabbage looper - Lepidoptera	69. Hessian fly - Diptera
26. Caddisfly - Trichoptera	70. Honey bee - Hymenoptera
27. Camel cricket - Orthoptera	71. Horntail - Hymenoptera
28. Carolina grasshopper - Orthoptera	72. Horse fly - Diptera
29. Carpenter ant - Hymenoptera	73. House fly - Diptera
30. Carpenter bee - Hymenoptera	74. Ichneumon wasp - Hymenoptera
31. Carrion beetle - Coleoptera	75. Indian meal moth – Lepidoptera
32. Cecropia moth – Lepidoptera	76. Japanese beetle - Coleoptera
33. Chinch bug - Hemiptera	77. June beetle - Coleoptera
34. Cicada killer wasp - Hymenoptera	78. Katydid - Orthoptera
35. Click beetle - Coleoptera	79. Lace bug - Hemiptera
36. Clover leaf weevil - Coleoptera	80. Lady beetle - Coleoptera
37. Cluster fly – Diptera	81. Locust leafminer - Coleoptera
38. Codling moth - Lepidoptera	82. Longhorned beetle - Coleoptera
39. Colorado potato beetle - Coleoptera	83. Luna moth – Lepidoptera
40. Common stalk borer - Lepidoptera	84. Mayfly - Ephemeroptera
41. Corn earworm - Lepidoptera	85. Mexican bean beetle - Coleoptera
42. Corn flea beetle - Coleoptera	86. Midge (chironomid) – Diptera
43. Cottony maple scale - Homoptera	87. Mimosa webworm - Lepidoptera
44. Crane fly - Diptera	88. Mole cricket - Orthoptera

Common names and order, continued

Common Name – Order Name	Common Name – Order Name
89. Monarch butterfly - Lepidoptera	121. Squash vine borer - Lepidoptera
90. Mosquito - Diptera	122. Stable fly - Diptera
91. Mud dauber wasp - Hymenoptera	123. Stag beetle - Coleoptera
92. Northern corn rootworm - Coleoptera	124. Stink bug - Hemiptera
93. Oriental cockroach - Dictyoptera	125. Stonefly - Plecoptera
94. Oystershell scale - Homoptera	126. Strawberry root weevil - Coleoptera
95. Pavement ant – Hymenoptera	127. Striped cucumber beetle - Coleoptera
96. Peachtree borer - Lepidoptera	128. Swallowtail butterfly - Lepidoptera
97. Periodical cicada - Homoptera	129. Sweat bee – Hymenoptera
98. Picnic beetle - Coleoptera	130. Syrphid fly - Diptera
99. Pine needle scale - Homoptera	131. Tarnished plant bug - Hemiptera
100. Plum curculio - Coleoptera	132. Termite - Isoptera
101. Polistes paper wasp - Hymenoptera	133. Thrips – Thysanoptera
102. Potato leafhopper - Homoptera	134. Tiger beetle - Coleoptera
103. Praying mantis - Dictyoptera	135. Tiger moth - Lepidoptera
104. Redlegged grasshopper - Orthoptera	136. Tobacco hornworm - Lepidoptera
105. Rice weevil - Coleoptera	137. Tomato hornworm - Lepidoptera
106. Robber fly - Diptera	138. Tortoise beetle - Coleoptera
107. Rose chafer - Coleoptera	139. Treehopper - Homoptera
108. Rove beetle – Coleoptera	140. Tulip tree scale - Homoptera
109. Satyr – Lepidoptera	141. Tussock moth - Lepidoptera
110. Sawfly - Hymenoptera	142. Velvet ant - Hymenoptera
111. Sawtoothed grain beetle - Coleoptera	143. Viceroy butterfly - Lepidoptera
112. Scorpionfly - Mecoptera	144. Vinegar fly – Diptera
113. Seedcorn beetle - Coleoptera	145. Walkingstick - Dictyoptera
114. Silverfish - Thysanura	146. Water strider – Hemiptera
115. Sod webworm - Lepidoptera	147. Western corn rootworm - Coleoptera
116. Soldier beetle – Coleoptera	148. Whitefly - Homoptera
117. Spittlebug - Homoptera	149. Wood cockroach – Dictyoptera
118. Spotted cucumber beetle - Coleoptera	150. Yellowjacket – Hymenoptera
119. Springtail - Collembola	
120. Squash bug - Hemiptera	

Other -- Non-Insects

The following are all non-insects that are described in the Entomology CDE references. They may show up on a question (because they are part of the book), but they will NOT be included in the Insect ID portion of the CDE.

Class	Subclass name
Centipede	Chilopoda
Sowbug	Crustacea
Spider	Arachnida
Tick	Acari (SC)
Mite	Acari (SC)
Millipede	Diplopoda

Resources

- Purdue's Department of Entomology 4-H and Youth [website](#) – information on how to identify insects, how to create insect collections, special training activities, and other links of interest to youth and their leaders. Also provides sample quizzes for the Career Development Event (CDE).
- 4-H, www.four-h.purdue.edu/natural_resources/career.html
- Entomology Extension, <http://extension.entm.purdue.edu/publications.php>

FORESTRY

A. OBJECTIVES - The objectives of the 4-H/FFA Ag. Forestry event for youth are:

1. To develop leadership skills, to work as a team, and to practice good study habits.
2. To acquire information about forest ecosystems and forestry skills used in forest management and the utilization of forest products.
3. To appreciate and manage wisely Indiana's forest resources.

B. AREA Event - Most areas will need to hold an area contest to determine which teams qualify to attend the state event. Contestants should bring clipboards and pencils. Participants may be given a list of trees and write the appropriate number on the answer sheet to identify the leaves (at the discretion of the Area Event Coordinator and event committee). Scantron may be used to score.

Contestants should bring clipboards and pencils. Participants will be given a list of trees and write the appropriate number on the answer sheet to identify the leaves. Some problems may require simple math calculations, however, no calculators will be allowed.

Junior Event - identify 20 leaves and 10 seeds. The junior written quiz will have 20 questions. Quiz questions will be taken from the Question Bank found at:

www.four-h.purdue.edu/natural_resources/career.html (click on Forestry).

The questions may be rephrased (the content will not be altered) and the answers may be re-arranged from what is listed in the Question Bank.

Senior Event - identify 30 leaves, 10 seeds, and 5 woods. The senior written quiz will consist of 50 questions. Quiz questions will be taken from the Question Bank found at:

www.four-h.purdue.edu/natural_resources/career.html (click on Forestry).

The questions may be rephrased (the content will not be altered) and the answers may be re-arranged from what is listed in the Question Bank.

Materials - Area event specimen kits are maintained by Area 4-H and FFA Event Coordinators. They should be used for the Area CDE only. Area kits contain leaf, seed, and wood specimens. Master copies of answer sheets, questions, and keys for area events will be distributed to Area 4-H Coordinators. Event coordinators are asked to do their own photo-copying. Practice specimens for the event should be prepared by local 4-H clubs and FFA chapters. See directions for preparing a kit at the website: www.four-h.purdue.edu/natural_resources/career.html (Click on Forestry).

Scoring

Junior Event	(Area)	Suggested Time (minutes)	Points
	identifications: 30, 10 points each	15 to 20	300
	written quiz: 20 questions, 7 points each	15	140
TOTAL POSSIBLE POINTS			440

Senior Event	(Area)	Suggested Time (minutes)	Points
	identifications, 45, 10 points each	25 to 30	450
	written quiz: 50 questions, 7 points each	30	350
TOTAL POSSIBLE POINTS			800

Note: In the event of a tie for high score: Ties will be broken by asking additional questions. Five "tie breaker" questions may be provided for this purpose.

C. STATE Event

We run this CDE with a staggered start so that every team sees the same specimens (senior or junior). They start times follow the schedule shown below.

Even Years	Odd Years
9 AM Start: Teams in Extension Areas 1-6	9 AM Start: Teams in Extension Areas 7-11.
10:30* Start: Teams in Extension Areas 7-11.	10:30* Start: Teams in Extension Areas 1-6

*the second group will begin as soon as the first group (9 AM start) is finished.

Contestants should bring clipboards and pencils. Participants will be given a list of trees and write the appropriate number on the answer sheet to identify the leaves. Some problems may require simple math calculations, however, no calculators will be allowed.

Junior Event - identify 30 leaves and 10 seeds. The junior written quiz will have 20 questions. Quiz questions will be taken from the Question Bank found at:

www.four-h.purdue.edu/natural_resources/career.html (click on Forestry).

The questions may be rephrased (the content will not be altered) and the answers may be re-arranged from what is listed in the Question Bank.

Senior Event - identify 35 leaves, 10 seeds, and 5 woods. The senior written quiz will have 50 questions. Quiz questions will be taken from the Question Bank found at:

www.four-h.purdue.edu/natural_resources/career.html (click on Forestry).

The questions may be rephrased (the content will not be altered) and the answers may be re-arranged from what is listed in the Question Bank.

Materials - The state event is held at Purdue University. Practice specimens for the event should be prepared by local 4-H clubs and FFA chapters. See directions for preparing a kit at the website:

www.four-h.purdue.edu/natural_resources/career.html (Click on Forestry).

Scoring

Junior Event	(State)	Suggested Time (minutes)	Points
	identifications: 40, 10 points each	20	400
	written quiz: 20 questions, 7 points each	15	140
TOTAL POSSIBLE POINTS			540

Senior Event	(State)	Suggested Time (minutes)	Points
	identifications, 50, 10 points each	25	500
	written quiz: 50 questions, 7 points each	30	350
TOTAL POSSIBLE POINTS			850

Notes:

- ID: Contestants will choose from 5 possible answers.
- Both the Identification and Quiz portions of this CDE will be electronically scored using Scantron.
- Ties will be broken by asking additional questions. Five "tie breaker" questions may be provided for this purpose.

D. List of Possible Specimens

Leaves	
1. American basswood (<i>Tilia americana</i>)	12. Black willow (<i>Salix nigra</i>)
2. American beech (<i>Fagus grandifolia</i>)	13. Boxelder (<i>Acer negundo</i>)
3. American elm (<i>Ulmus americana</i>)	14. Bur oak (<i>Quercus macrocarpa</i>)
4. American hornbeam/ Blue beech (<i>Carpinus caroliniana</i>)	15. Butternut (<i>Juglans cinerea</i>)
5. Bitternut hickory (<i>Carya cordiformis</i>)	16. Chestnut oak (<i>Quercus prinus</i>)
6. Black cherry (<i>Prunus serotina</i>)	17. Chinquapin oak (<i>Quercus muhlenbergii</i>)
7. Black gum/Black tupelo (<i>Nyssa sylvatica</i>)	18. Eastern cottonwood (<i>Populus deltoides</i>)
8. Black locust (<i>Robinia pseudoacacia</i>)	19. Eastern redbud (<i>Cercis canadensis</i>)
9. Black maple (<i>Acer nigrum</i>)	20. Eastern redcedar (<i>Juniperus virginiana</i>)
10. Black oak (<i>Quercus velutina</i>)	21. Eastern white pine (<i>Pinus strobus</i>)
	22. Flowering dogwood (<i>Cornus florida</i>)

11. Black walnut (<u>Juglans nigra</u>)	23. Hackberry (<u>Celtis occidentalis</u>)
Leaves, continued	
24. Honeylocust (<u>Gleditsia triacanthos</u>)	40. Red pine (<u>Pinus resinosa</u>)
25. Ironwood /Eastern hophornbeam (<u>Ostrya virginiana</u>)	41. River birch (<u>Betula nigra</u>)
26. Jack pine (<u>Pinus banksiana</u>)	42. Sassafras (<u>Sassafras albidum</u>)
27. Kentucky coffeetree (<u>Gymnocladus dioica</u>)	43. Scotch pine (<u>Pinus sylvestris</u>)
28. Largetooth/Bigtooth aspen (<u>Populus grandidentata</u>)	44. Shagbark hickory (<u>Carya ovata</u>)
29. Mockernut hickory (<u>Carya tomentosa</u>)	45. Shingle oak (<u>Quercus imbricaria</u>)
30. Northern catalpa (<u>Catalpa speciosa</u>)	46. Silver maple (<u>Acer saccharinum</u>)
31. Northern red oak (<u>Quercus rubra</u>)	47. Slippery elm/Red elm (<u>Ulmus rubra</u>)
32. Ohio buckeye (<u>Aesculus glabra</u>)	48. Sugar maple (<u>Acer saccharum</u>)
33. Osage-orange (<u>Maclura pomifera</u>)	49. Swamp white oak (<u>Quercus bicolor</u>)
34. Persimmon (<u>Diospyros virginiana</u>)	50. Sweetgum (<u>Liquidambar styraciflua</u>)
35. Pignut hickory (<u>Carya glabra</u>)	51. Sycamore (<u>Platanus occidentalis</u>)
36. Pin oak (<u>Quercus palustris</u>)	52. Tuliptree/Yellow-poplar (<u>Liriodendron tulipifera</u>)
37. Quaking aspen (<u>Populus tremuloides</u>)	53. Virginia pine (<u>Pinus virginiana</u>)
38. Red maple (<u>Acer rubrum</u>)	54. White ash (<u>Fraxinus americana</u>)
39. Red mulberry (<u>Morus rubra</u>)	55. White oak (<u>Quercus alba</u>)

SEEDS	WOODS
1. American basswood (<u>Tilia americana</u>)	1. American basswood (<u>Tilia americana</u>)
2. American beech (<u>Fagus grandifolia</u>)	2. American beech (<u>Fagus grandifolia</u>)
3. American hornbeam/ Blue beech (<u>Carpinus caroliniana</u>)	3. American elm (<u>Ulmus americana</u>)
4. Black oak (<u>Quercus velutina</u>)	4. Black cherry (<u>Prunus serotina</u>)
5. Black walnut (<u>Juglans nigra</u>)	5. Black walnut (<u>Juglans nigra</u>)
6. Bur oak (<u>Quercus macrocarpa</u>)	6. Butternut (<u>Juglans cinerea</u>)
7. Butternut (<u>Juglans cinerea</u>)	7. Eastern redcedar (<u>Juniperus virginiana</u>)
8. Eastern redcedar (<u>Juniperus virginiana</u>)	8. Northern red oak (<u>Quercus rubra</u>)
9. Eastern white pine (<u>Pinus strobus</u>)	9. Sassafras (<u>Sassafras albidum</u>)
10. Honeylocust (<u>Gleditsia triacanthos</u>)	10. Shagbark hickory (<u>Carya ovata</u>)
11. Eastern hophornbeam/ Ironwood (<u>Ostrya virginiana</u>)	11. Slippery elm/Red elm (<u>Ulmus rubra</u>)
12. Jack pine (<u>Pinus banksiana</u>)	12. Sycamore (<u>Platanus occidentalis</u>)
13. Kentucky coffeetree (<u>Gymnocladus dioica</u>)	13. Sugar maple (<u>Acer saccharum</u>)
14. Northern red oak (<u>Quercus rubra</u>)	14. Tuliptree/Yellow-poplar (<u>Liriodendron tulipifera</u>)
15. Ohio buckeye (<u>Aesculus glabra</u>)	15. White ash (<u>Fraxinus americana</u>)
16. Persimmon (<u>Diospyros virginiana</u>)	16. White oak (<u>Quercus alba</u>)
17. Red maple (<u>Acer rubrum</u>)	
18. Shagbark hickory (<u>Carya ovata</u>)	
19. Silver maple (<u>Acer saccharinum</u>)	
20. Sugar maple (<u>Acer saccharum</u>)	
21. Sweetgum (<u>Liquidambar styraciflua</u>)	
22. Sycamore (<u>Platanus occidentalis</u>)	
23. Tuliptree/Yellow-poplar (<u>Liriodendron tulipifera</u>)	
24. Virginia pine (<u>Pinus virginiana</u>)	
25. White oak (<u>Quercus alba</u>)	
	Note: Some of the 56 tree species used in the identification contest are not described in "Fifty trees of Indiana", therefore supplementary tree identification books are recommended.

E. Resources

Additional references are available on-line at:

- Articles: <http://www.fnr.purdue.edu/extension/index.shtml> See **Forests and Trees and Wood Products sections.**
- Articles: Purdue Extension [publications](https://mdc.itap.purdue.edu/), <https://mdc.itap.purdue.edu/>, Search For: **forestry, wood**
- On-line ID: Iowa State University Extension, Identification of Common Trees of Iowa: <http://www.extension.iastate.edu/pages/tree/>, see **Index of Iowa Trees**

HORSE JUDGING CONTEST

I. OBJECTIVES

- a. To learn principles of horse and pony selection and evaluation and to develop the ability to make sound decisions based on observations and to defend these decisions verbally.
- b. To learn to appraise horses and ponies visually as a part of a sound breeding and management program as well as a means of evaluation in horse shows and contests.

II. SUGGESTIONS FOR COUNTY AND AREA HORSE AND PONY JUDGING CONTEST

- a. Establish, prior to December 31st, the county that will host the county or area event. Designate the chairperson of the event. He or she will need help, but someone must be the primary organizer.
- b. Make contacts for horses shortly after January 1. Receive commitments to help at this time. Follow up on these "horse suppliers" promises on monthly intervals until four weeks prior to the event; then weekly. Have judge and/or reasons takers lined up on same time schedule as horses for classes.
- c. Select from county or area horse leaders the following personnel:
 1. Announcer
 2. Timekeeper
 3. Four group leaders
 4. Horse organizer to keep classes moving and ready
 5. Card collector
 6. Card graders
 7. Registration clerks
- d. Collect the following equipment for day of event:
 1. Stop watches
 2. Portable loudspeaker
 3. Sets of numbers
 4. Rubber bands
 5. Masking tape
 6. Placing and reason cards
 7. Adding machines
 8. Tabulating paper
 9. Hormel scoring cards
- e. It is suggested there be at least three halter classes (minimum of one for reasons) and three performance classes (minimum of one for reasons).

III. GUIDELINES

- a. The publication 4-H 923-W, "Conducting and Coordinating a Livestock, Dairy, or Horse Judging Contest" is available on the Purdue website. It is suggested that area events follow rules and suggestions for the state event as closely as possible in order to eliminate confusion for judging contestants and workers. For further assistance, contact Colleen Brady, Department of 4-H Youth, Purdue University, West Lafayette, Indiana 47907-1161 or by phone at (765) 494-8439.

IV. STATE CONTEST CLASSES

The following applies to the State Contest for senior 4-H, FFA, and junior contestants.

- a. Contestants shall judge at least four halter classes - consisting of both English and Western breeds plus there will be 3-5 performance classes.
- b. Halter classes may be selected from any of the following:
 1. Appaloosa
 2. Arabian
 3. Morgan
 4. Saddlebred
 5. Paint
 6. Miniature
 7. Palomino
 8. Ponies
 9. Thoroughbreds (hunter type)
 10. Walking Horses
 11. Quarter Horses
 12. Draft Horses
 13. Haflinger
- c. Performance classes will be selected from those described in the official handbook published by the Indiana 4-H Horse and Pony Program. Those performance classes most likely to be held will be: Hunter Under Saddle, English Pleasure, Western Pleasure, Pleasure Driving, Western Riding, Reining, and Hunter Hack.
- d. All halter classes will be judged on conformation, correctness of type for the breed and way of going. All halter horses will be considered sound unless otherwise announced.
- e. Performance horses should be judged on manners, ways of going and responses to the cues and aids of the rider. Performance classes will be judged as they are in regard to soundness.
- f. Each contestant will be allowed a maximum of 15 minutes on non-reason classes and 17 minutes to place and take notes on each reason class.
- g. Contestants may not touch the animals during close inspection.

V. ORAL REASONS

- a. Prior to the beginning of the contest, contestants will be told which classes are reasons classes; or to treat all classes as reasons classes, with the announcement of which classes will be made after the classes have been completed, and the officials have determined the most appropriate reasons classes.
- b. Contestants will be held in a waiting room to prepare their oral reasons. No reference materials will be allowed in the waiting room for the Senior 4-H or FFA divisions. Junior division contestants may have references in the waiting room. All contestants are expected to work quietly in the waiting room. Excessive noise, or disruption, as determined by the room moderator(s) will result in disqualification of the contestant from the contest.
- d. The reasons will be given orally before the judge or judges in a private room. Notes may not be used in the reasons room for any division.
- e. Two minutes will be allowed for giving reasons.
- f. Oral reasons will be given on at least two halter classes and two performance classes in the Senior 4-H and FFA divisions.

VI. FINAL INDIVIDUAL RANKING

- a. This shall be the combined score from the placings and the oral reasons.
- b. Fifty points shall constitute a perfect score in placing the animals.
- c. Fifty points shall constitute a perfect score for oral reasons.

VII. GROUP LEADERS

- a. A group leader shall be in charge of each group to move the contestants, to assist in supervising the class to see that the animals are properly shown and moved and to answer any questions which may not pertain to the actual placing and/or instruction regarding the animal under consideration.

VIII. PROCEDURES

- a. During registration, each contestant will be assigned to a group and remain with that group until the event is completed.
- b. Each contestant will be provided with placing cards for each class to be judged and note cards for reasons classes.
- c. Contestants in the judging event should report to the superintendent in charge of the event at least 30 minutes prior to the scheduled STARTING TIME for verification of pre-registration.
- d. Only judging contestants will be permitted in the judging ring except those individuals assigned to assist with the event.

IX. TIES (based on the three highest contestants' scores that went into making the tie) will be broken by the following criteria for each division:

- a. **Individual rank** - If two or more contestants have the same total points score, it will be broken by total reasons score.
- b. **Team rank** - If two or more teams have a combined total points score that is the same, the tie will be broken by a combined total reasons score.
- c. If still tied for either Individual and/or team rank, the contestant or team having the highest placing score in the class(es) with the lowest total cuts, will be listed first.
- d. If still tied, the contestant or team with the highest total placing score (adding together the placing scores on reasons classes) on reasons classes, will be listed first.
- e. If still tied, the contestant or team with the highest single class reason score will be listed first.
- f. Ties for individuals and teams in the oral reasons category will be broken such that the contestant or team with the lower total placing score (adding together the placing scores on reasons classes) on reasons classes, will be listed first.
- g. If all of the above fail, duplicate awards shall be given.

The top ten 4-H senior teams and the top ten FFA senior teams win the opportunity to attend and participate in trips to designated national and/or invitational events.

JUNIOR HORSE JUDGING CONTEST

- A. All general guidelines and those in the horse section apply.
- B. Contestants will judge the same halter and performance classes as the Senior 4-H and FFA divisions.
- C. Contestants will give two sets of oral reasons (one on a halter class and one on a performance class) that will count along with the placing scores in the total scores.
- D. Ties will be broken by the following criteria:
(Teams based on the three highest contestants' scores that went into making the ties.)
 - 1. If two or more contestants or teams have the same total score, the contestant or team with the highest reasons score will be listed first.
 - 2. If still tied, the contestant or team with the highest score in placing halter classes will be listed first.
 - 3. If still tied, the contestant with the most perfect placing scores (50) will be listed first, etc.

X. REFERENCES

Indiana 4-H Horse & Pony Handbook (4-H 661)
Purdue University Horse Judging Manual (4-H 955)
See last four pages of this 4-H/FFA Ag. Judging Handbook.

Video tapes from Purdue University Film Library (Order through County Extension Office.)

Refer to the Indiana 4-H Horse and Pony Web site www.four-h.purdue.edu and select: Projects/Activities, then select Horse and Pony, for a current list of video tapes and other materials available through the film library.

HORTICULTURE (Invitational)

Note: The state contest is an invitational, which means no elimination contests are required for participation. However, for the educational value of this program, we strongly recommend County and area contests.

I. Purpose

- A. The production, marketing and buying of flower, fruit, vegetable and ornamental crops require a detailed knowledge of many subject matter disciplines.
- B. The judging, information and identification contest is in effect a training program concerned with:
 - 1. Teaching individuals to recognize and identify some of our most important horticultural crops.
 - 2. To learn quality characteristics.
 - 3. To be able to answer questions or solve problems on horticultural subjects.

II. Suggestions for a Local Contest and Area Contest

- A. Assign contestant a number to be used throughout the contest.
- B. Junior Division
 - 1. County, area and state contests.
 - 2. Contestants would compete as a 4-H or FFA team.
 - 3. Team will be composed of three or four members.
 - 4. County and area levels would include photos only. State level will be live specimens.
 - 5. Should include quiz of 40 questions (objective or true/false).
 - 6. Scoring
 - a. 120 points for identification
 - b. 80 points for quiz
 - c. 200 total points
 - 7. References
 - a. 4-H manuals
 - b. Flower and garden publications
 - 8. Suggestion: Give the quiz first. (Allow 30 minutes.) Lay out identification specimens on tables.
 - 9. Juniors identify 60 specimens from the study list of 80.

Clover and Junior Study List

<u>Vegetables</u>	<u>Fruits and Nuts</u>	<u>Flowers</u>	<u>Ornamentals</u>
Asparagus	Apple	African Violet	Arborvitae
Bean	Apricot	Begonia	Birch
Beet	Avocado	Cactus	English Ivy
Cabbage	Banana	Chrysanthemum	Euonymus
Carrot	Blackberry	Cockscomb	Flowering Dogwood
Cauliflower	Blueberry	Coleus	Forsythia
Celery	Cherry	Daffodil	Holly
Corn	English Walnut	Daylily	Honey Locust
Cucumber	Grape	Easter Lily	Juniper
Lettuce	Grapefruit	Geranium	Lilac
Muskmelon	Lemon	Gladiolus	Maple
Onion	Orange	Marigold	Oak
Peas	Peach	Pansy	Periwinkle
Pepper	Peanut	Peony	Pine
Potato	Pear	Petunia	Redbud
Radish	Pecan	Philodendron	Spruce
Spinach	Persimmon	Poinsettia	Sweetgum
Squash	Plum	Snapdragon	Tulip Tree
Tomato	Raspberry	Tulip	Willow
Watermelon	Strawberry	Zinnia	Yew

C. Senior Division (County, area and state contests)

1. Contestants compete as 4-H or FFA teams.
2. Teams will consist of three or four members.
3. Rules and Regulations (rules listed in the general section will prevail unless listed below).
 - a. The contest has two divisions:
 1. 4-H: This division is for official 4-H club teams, which may consist of three or four members. The three high individual scores are the team score.
 2. FFA: This division is for official FFA teams, which may consist of three or four members. The high three individual scores are the team score.
 - b. Ties for team and individual awards will be broken by one of the following methods in order.
 - 1a. The team having the highest score in the identification section will receive the higher placing. Scores of alternate members of the three-member teams will not be considered.
 - 1b. The individual having the highest score in the identification section will receive the high placing.
 - 2a. If teams tie in total scores and also in scores in the identification section, the tie will be broken by an additional short quiz and/or specimens.
 - 2b. If individuals tie in total scores and also in scores in the identification, the tie will be broken by an additional short quiz and/or specimens.
 - c. Members of Senior Division teams must be eligible for the national contest.

- d. The state contest will be set up by the Purdue Horticulture Department or a committee appointed by the State IJHA committee and coordinated by the State 4-H Office.
 - e. Each contestant will get an entry number by which they will be designated throughout the contest.
 - f. If there are any special cases that these rules do not cover, they will be acted upon by the general committee in charge of the contest.
4. Seniors identify 100 specimens from the study list of 180.
5. Scoring:
- a. Judge eight classes of four plates each of two vegetables, two fruits, two flowers and two ornamentals. The classes are judged on the basis of quality and condition.
 - b. Points:
 - 1. Judging--total 80 points. (400 points if computer calculation used)
 - 2. Identification--total 200 points. (1000 points if computer used)
 - a. Identify 100 specimens from the study list of 180.
 - b. Pictures or live specimens in county and area levels. Live specimens at state level.
 - 3. Quiz--total 160 points (800 points if computer used)
 - a. Objective type questions dealing with horticultural topics are selected from the reference list in section 8.
 - 4. Total Points--440 (2,200 if computer used)
6. Recognition and Awards (State Contest)
- a. The top overall winning 4-H team and FFA team will receive partial payment of trip expenses (provided by the Indiana State Fair Board) to attend the NJHA National Convention and Judging Contest.
 - 1. Appropriate recognition will be awarded by the Indiana Vegetable Growers Association as follows: (See Section Q--Awards--under Contest Rules and Criteria of this publication for the details.)
 - b. Coaches of state winning teams in 4-H and FFA should contact William Wilder, Columbia City High School, phone: (219) 244-6136, Ext. 205, for references for the quiz given at the national level.
8. Suggested References
- a. Purdue Consumer Horticulture's Plant Identification for 4-H/FFA Horticulture Contests (web only): <http://www.hort.purdue.edu/ext/senior/senior.htm>

Horticulture Judging reference list (updated 02/02)

Note: Almost all of these publications are available online at Purdue's Consumer Horticulture page, along with many others that you and your students may find helpful. <http://www.hort.purdue.edu/ext/conhort.html>
 For others please consult Purdue Extension publications website: <http://www.agriculture.purdue.edu/agcomm/campus/other/mdc/catalog.html> or your County Extension office.

Topics covered in quizzes:

Home Gardener's Guide	HO-32-W (reviewed 4/01)
Starting Seed Indoors	HO-14-W (reviewed 4/01)
New Plants From Cuttings	HO-37 (rerun 6/99)
Growing Perennial Flowers	HO-61 (rerun 7/99)
Growing Annual Flowers	HO-99 (rerun 6/99)
African Violet Care	HO-10-W (revised 3/01)
Terrariums	HO-13-W (reviewed 4/01)
Indoor Plant Care	HO-39-W (reviewed 5/01)
Fruits and Nuts for Edible Landscaping	HO-190-W (revised 5/01)
Pollination of Fruits and Nuts	HO-174 (rev 01/82)
Lawn Fertilization for Established Turf	AY-4 (rerun 1/93)
Residential landscape Design Series	HO-204, 205, 206 (out of print – expected to be re-run)
Floral Design	NCR-139 (out of print)

(See <http://flowers.hort.purdue.edu/web/consumer.htm> for flower arranging publications)

***New to the list, will be included in Quiz questions:**

New Plants From Layering	HO-1-W (reviewed 3/01)
Growing Herbs	HO-28-W (revised 1/02)
Flowering Bulbs	HO-86-W (revised 6/01)
Add Hours to Your Flowers	HO-158-W (revised 5/01)
A Guide to Flowering & Why Plants Fail to Bloom	HO-173 (revised 7/99)
Weed Control for the Garden & Landscape	HO-217 (revised 7/94)

Out of print, will no longer be included in quiz questions:

Corsages	HO-84
Apple Cultivars	HO-165
Dwarf Apple Trees	HO-107

SENIOR STUDY LIST

FLOWERS & INDOOR PLANTS

African Violet
 Ageratum

 Amaryllis
 Bachelor Button
 Begonia
 Boston Fern
 Cactus
 Anna
 Chrysanthemum
 Cockscomb
 Coleus
 Columbine
 Cosmos
 Crocus
 Cyclamen
 Daffodil
 Dahlia
 Dally
 Dracena
 Dumbcane (Dieffenbachia)
 Lily (Easter, Asiatic Driantal)
 Geranium
 Gladiolus
 Gloxinia
 Hosta
 Hyacinth
 Impatiens
 Iris
 Jade Plant (Crassula)
 Marigold
 Nasturtium
 Orchid
 Pansy

 Peony
 Peperomia
 Petunia
 Philodendron
 Poinsettia
 Portulaca
 Rose
 Rubber Plant (Ficus)
 Salvia
 Schefflera
 Snakeplant (Sansevieria)
 Snapdragon
 Sweet Alyssum
 Tulip
 Zinnia

FRUITS & NUTS

Almond
 Apple

 Apricot
 Avocado
 Banana
 Blackberry
 Black Walnut
 Blueberry
 Brazil Nut
 Butternut
 Cashew
 Cherry
 Chestnut
 Coconut
 Cranberry
 Currant
 Date
 Elderberry
 Fig
 Filbert
 Gooseberry
 Grape
 Grapefruit
 Hickory Nut
 Kumquat
 Lemon
 Lime
 Macadamia Nut
 Mango
 Mulberry
 Nectarine
 Orange
 Papaya

 Peach
 Peanut
 Pear
 Pecan
 Persimmon
 Pineapple
 Plum
 Pomegranate
 Raspberry
 Strawberry
 Tangerine
 Walnut (English)

ORNAMENTALS

Arborvitae
 American Planetree
 (Sycamore)
 Ash
 Azalea or Rhododendron
 Barberry
 Basswood
 Beech
 Bermuda Grass
 Birch
 Bluegrass
 Boxwood
 Camellia
 Cotoneaster
 Elm
 English Ivy
 Euonymus
 Fescue (tall or fine leafed)
 Fir
 Flowering Dogwood
 Forsythia
 Ginkgo
 Hawthorn
 Hemlock
 Holly
 Honey Locust
 Hydrangea
 Juniper
 Lilac
 Magnolia
 Mahonia
 Maple
 Oak
 Pachysandra (Japanese
 Spurge)
 Periwinkle (Vinca Minor)
 Pine
 Pittosporum
 Privet
 Redbud
 Spirea
 Spruce
 Sweetgum
 Tulip Tree (Tulip Poplar)
 Viburnum
 Willow
 Yew
 Zoysia Grass

VEGETABLES

Artichoke
 Asparagus

 Basil
 Bean
 Beet
 Broccoli
 Brussels Sprouts
 Cabbage
 Carrot
 Cauliflower
 Celery
 Chinese Cabbage
 Chives
 Collards
 Corn
 Cucumber
 Dill
 Eggplant
 Endive (all types)
 Garlic
 Kale
 Kohlrabi
 Leek
 Lettuce
 Muskmelon (Cantaloupe)
 Mustard
 Okra
 Onion
 Parsley
 Parsnip
 Peas
 Pepper
 Potato

 Pumpkin
 Radish
 Rhubarb
 Rutabaga
 Sage
 Spinach
 Squash
 Sweet Potato
 Swiss Chard
 Tomato
 Turnip
 Watermelon

To eliminate any possible confusion, the botanical name of each ornamental is provided.

Arborvitae	Thuja sp. or Platycladus sp.
Planetree (Sycamore)	Platanus sp.
Ash	Fraxinus sp.
Azalea or Rhododendron	Rhododendron sp.
Barberry	Berberis sp.
Basswood (Linden)	Tilia sp.
Beech	Fagus sp.
Bermuda Grass	Cynodon dactylon
Birch	Betula sp.
Bluegrass	Poa pratensis
Boston Ivy	Parthenocissus tricuspidata
Boxwood	Buxus sp.
Camellia	Camellia sp.
Cotoneaster	Cotoneaster sp.
Elm	Ulmus sp.
English Ivy	Hedera helix
Euonymus	Eyonymus sp.
Fescu (tall or fine leafed)	Festuca sp.
Fir	Abies sp.
Flowering Dogwood	Cornus florida
Forsythia	Forsythia intermedia
Ginkgo	Ginkgo biloba
Hawthorn	Crataegus sp.
Hemlock	Tsuga canadensis
Holly	Ilex sp.
Honey Locust	Gleditsia triacanthos
Hydrangea	Hydrangea sp.
Juniper	Juniperrus sp.
Lilac	Syringa sp.
Magnolia	Magnolia sp.
Mahonia	Mahonia sp.
Maple	Acer sp.
Oak	Quercus sp.
Pachysandra (Japanese Spurge)	Pachysandra terminalis
Periwinkle	Vinca minor
Pine	Pinus sp.
Pittosporum	Pittosporum tobira
Privet	Ligustrum sp.
Redbud	Cercis canadensis
Spiraea	Spiraea sp.
Spruce	Picea sp.
Sweetgum	Liquidambar styraciflua
Tulip Tree (Tulip Poplar)	Liriodendron tulipifera
Viburnum	Viburnum sp.
Willow	Saliz sp.
Yew	Taxus sp.
Zoysia Grass	Zoysia japonica

Note: sp. indicates that any horticultural species within the genus may be used on the identification or judging portion of the horticulture contest.

LIVESTOCK

A. Suggestions for County and Area Events

1. Contact should be made by February 1 concerning location, livestock and officials for county and area events. The county Extension Educator should be the contact person regarding materials, site or location and officials to assist in conducting the event.
2. The supplies necessary for conducting a livestock judging event are judging cards, score sheets and a Hormel system for hand computing or a computer software/hardware system for scoring the judging classes. These materials should all be available through the County Extension office.
3. The secret to conducting an educational event of any kind is organization. Make sure that adequate personnel is available from both 4-H and Vo-Ag areas to conduct the event in an organized, systematic manner. It is very important to have placeable classes and officials that are capable of listening to reasons and scoring contestants according to their abilities displayed at the event. It is recommended that organizers read and understand publication 4-H 923 W, "How to Plan, Organize, and Administrate a Livestock, Dairy or Horse Judging Contest."

B. State Contest

The following classes will be a part of the State event. The area chairpersons have discretionary control of appropriate classes for area events.

1. Nine to twelve classes of beef, Boer goats, sheep and swine are to be judged with oral reasons given on two classes of each species of livestock, except goats. 750 points.
 - a. Beef – 3 to 5 classes, including at least one class of market steers. Remaining classes will consist of yearling heifers and yearling bulls (if available) from breeds available in the area.
 - b. Boer goats – 1 class of Boer goat does
 - c. Swine - 3 or 4 classes, including at least one class of market hogs. Remaining classes will be breeding gilts or additional market hogs.
 - d. Sheep - 3 or 4 classes, including at least one class of market lambs (judged in a rack). Remaining classes will consist of ewe lambs, ram lambs, yearling ewes or additional market lambs.
2. Performance information will be provided on at least one breeding class per specie (except goats) and is to be considered when deciding placings. It is strongly recommended that the performance data be incorporated into the contestant's oral reasons, as justification of their placings.
3. Procedures:
 - a. The performance data sheets will be available to the contestants as they judge the performance classes.
 - b. Each contestant will be allowed a maximum of 15 minutes to place and take notes on each class.
 - c. Each contestant will be allowed two minutes to give oral reasons. Contestants are not permitted to use notes while giving oral reasons.
 - d. Placing cards will be given to each contestant to record his/her placing of each class, including those for which reasons are required. Blank cards for note taking will be given to contestants in county and area events, but will not be furnished at the state event.
 - e. Cards that are left blank or marked with more than one placing will receive a zero score.

- f. The animals will be designated by number 1 - 2 - 3 - 4. Haltered or raked animals will be numbered 1 - 4 from left to right, as the contestants stand behind the animals.
4. Ties (based on the three highest contestants' scores that went into making the tie) will be broken by the following criteria for each division:
 - a. **Individual rank** - If two or more contestants have the same total points score, it will be broken by total reasons score.
 - b. **Team rank** - If two or more teams have a combined total points score that is the same, the tie will be broken by a combined total reasons score.
 - c. If still tied for either Individual and/or team rank, the contestant or team having the highest placing score in the class(es) with the lowest total cuts, will be listed first.
 - d. If still tied, the contestant or team with the highest total placing score (adding together the placing scores on reasons classes) on reasons classes, will be listed first.
 - e. If still tied, the contestant or team with the highest single class reason score will be listed first.
 - f. Ties for individuals and teams in the oral reasons category will be broken such that the contestant or team with the lower total placing score (adding together the placing scores on reasons classes) on reasons classes, will be listed first.

If all of the above fail, duplicate awards shall be given.

5. Special Awards:

Top Three Teams (4-H and FFA)	Each Species in FFA
Top Five Individuals (4-H and FFA)	Each Species plus Oral Reasons in 4-H

6. Reference

Teaching 4-H Oral Reasons, EM 4789, Washington State University, 1987. See last four pages of this 4-H/FFA Ag. Judging Handbook.

7. Supplemental/Optional Reference Items

- Nine Livestock Judging slide sets, printed sets of reasons and a Judging Manual are available through Vocational Education Productions. Call 1-800-235-4146 for details.
- Livestock Judging, Placement of Classes
 - Set 1 (SL1147) - 12 classes of beef, sheep & swine
 - Set 2 (SL1148) - 11 classes of beef, sheep & swine
 - Set 3 (SL1149) - 7 classes of beef
 - Set 4 (SL1150) - 9 classes of beef, sheep & swine
 - Set 5 (SL 1151) - 10 classes of beef, sheep & swine
 - Set 6 (SL 1152) - 15 classes of beef, sheep & swine
 - Set 7 (SL 1153) - 19 classes of dairy goats
 - Set 8 (SL1154) - 9 classes of beef, sheep & swine
 - Set 9 (SL1155) - 9 classes of beef, sheep & swine
- Nine Livestock Judging Videos are available through Creative Educational Video Call 1-800-922-9965 or Dr. Clint Rusk at 765/494-8427. Dr. Rusk has these tapes available to check out from his office.

Oral Reasons for Livestock Judging	CEV B10412B
Fundamental Livestock Judging	CEV B10401B
Judging Steers	CEV B20404B
Judging Heifers	CEV B20405B
Practice Cattle Judging	CEV B20415B
Swine Judging	CEV B60402B
Judging Breeding Swine	CEV B60403B
Judging Market Lambs	CEV B40407B
Judging Breeding Sheep	CEV B40408B

MEAT EVALUATION AND IDENTIFICATION CONTEST

I. Objectives

The Meat Contest is a learning experience designed to train youth in the following ways:

- A. Identification and selection of quality meat cuts.
- B. Selection of the proper cooking method.
- C. Carcass evaluation with emphasis on utilization of this information in a herd improvement program.

II. Implementation and Program Schedule

State Contest - last Saturday in January

- a. Registrations due: **January 15**
- b. As long as space is available, each county and each school may register multiple teams.
- c. A team consists of 4 members with the lowest team member's score being dropped.
- d. A plaque will be awarded to the top 4-H and FFA teams.

III. General Conduct of Contest

- A. Contestants will move from class to class in separate groups during the contest. No two teammates will be in the same group.
- B. Group leaders will be provided for each group.
- C. Contestants will not be permitted to:
 - 1. Handle or touch cuts under any condition.
 - 2. Use any mechanical aid, such as a measuring device, light, etc.
 - 3. Talk to fellow contestants at any time during the contest.
 - 4. Monopolize any one exhibit for any unreasonable length of time.
 - 5. Separate themselves from the class on which their group is working.
- E. The retail identification (ID) cuts may be different for the 4-H contest than they are for the FFA contest, due to different ID sheets.
- F. Contestants must bring their own clipboards and pencils.

IV. State 4-H Meat Contest Classes

The state 4-H meat contest will consist of three main parts:

- 1) Six placing classes
- 2) Forty cuts of meat for retail identification
- 3) Two sets of oral reasons

A. Six placing classes

300 points

- 1) Pork carcasses (with reasons)
- 2) Hams (with reasons)
- 3) One to two other placing classes from the following group:
 - Beef carcasses – Beef ribs - Beef Rounds – Beef short loins

Lamb Carcasses – Pork center loins – Pork center ribs

- 4) Two to three placing classes from the following group:
Bacon – Beef Porterhouse Steaks – Beef Ribeye Steaks – Beef T-bone Steaks
Beef Top Loin Steaks – Lamb Blade Chops – Lamb Double Chops – Lamb Loin
Chops
Ham Center Slices – Pork Loin Chops – Pork Rib Chops – Pork Sirloin Chops

B. Retail Identification of 40 Meat Cuts 400 points

Use updated National 4-H scorecard
Mark cookery method as D, M or DM

C. Two sets of oral reasons 100 points

1. Reasons to be given on hams, pork carcasses or retail cuts – 50 points/set
2. Reasons may not exceed two minutes in length.
3. Contestants will be penalized for using notes in the reasons room
4. Contestants will be allowed to take term sheets into the contest area

D. Total Points for the 4-H Meat Contest 800 points

V. State FFA Meat Judging Classes

The state FFA meat contest will consist of six main parts:

- 1) Six placing classes
- 2) Two sets of questions from placing classes
- 3) Forty cuts of meat for retail identification
- 4) Quality and Yield Grading four beef carcasses
- 5) A written exam
- 6) Meat formulation

A. Six placing classes 300 points

- 1) **Pork carcasses** (with questions)
- 2) **Hams** (with questions)
- 3) **One to two other placing classes from the following group:**
Beef carcasses – Beef ribs - Beef Rounds – Beef short loins
Lamb Carcasses – Pork center loins – Pork center ribs
- 4) **Two to three placing classes from the following group:**
Bacon – Beef Porterhouse Steaks – Beef Ribeye Steaks – Beef T-bone Steaks
Beef Top Loin Steaks – Lamb Blade Chops – Lamb Double Chops – Lamb Loin Chops
Ham Center Slices – Pork Loin Chops – Pork Rib Chops – Pork Sirloin Chops

B. Retail Identification of Forty Meat Cuts 240 points
Use updated National FFA scorecard

C. Beef Quality and Yield Grading 120 points

1. Contestants will quality and yield grade four beef carcasses.
2. Contestants may use yield grade formulation sheets to calculate final yield grades.
3. Contestants may use calculators.
4. See Meat Grading Scorecard for scoring procedures.

D. Written Examination over Meat Science and the Meat Industry 60 points

1. An assortment of 20 meat science questions in multiple choice format, worth 3 points/question

2. This examination is designed to allow contestants to demonstrate their scientific knowledge related to: meat animals, meat products, and the meat industry.
3. Use the Purdue Meat Science Website and the “Yellow Pages” as resources
4. Questions may also come from other sources

The following are references for the meat science and industry examination.

Principles of Meat Science 4 th Edition	Kendall Hunt Publishing Company 4050 Westmark Dr. Dubuque, IA 52002 (319)589-1000
Identifying Meat Cuts Meat Evaluation	} National Cattlemen’s Beef Association 444 North Michigan Ave. Chicago, IL 60611 Customer Service 1-800-368-3138

E. Questions over two placing classes 50 points

1. A total of ten questions worth 5 points each from two of the placing classes
2. Contestants may use their notes to answer the questions

F. Meat Formulation 50 points

Examples included in the coaches’ guide

G. Total Points for the FFA Meat Judging CDE 820 points

VI. Supplies for State Contest

- A. The contest officials shall provide the following:
 - score sheets
 - placing cards
 - cooler frocks
 - head cover
 - plastic grids

- B. Contestants should bring the following:
 - calculator
 - clip board
 - pencil
 - heavy coats, warm clothing for cooler

VII. Tie Breakers

Ties will be broken by using the scores first from Beef Quality and Yield Grading, second from Retail Meat Identification, and third from the written exam.

VIII. Resources and Equipment

The following are suggested teaching aids and materials for a Meat Evaluation Program in a school or county: 4-H 718 Indiana 4-H/FFA Meat Evaluation and Identification Contest and Coaches’ Guide, Purdue Cooperative Extension Service. Available at the Purdue Media Distribution Center.

Additional materials can be obtained from a variety of sources:

American Meat Science Association
 9140 Ward Parkway
 Kansas City, MO 64114
 (816) 444-3500
<http://www.meatscience.org/>

Veal Committee/NCBA
 444 North Michigan Avenue
 Chicago, IL 60611
 (312) 467-5520

National Cattlemen's Beef Association
 444 North Michigan Avenue
 Chicago, IL 60611
 (312) 467-5520
<http://www.beef.org/>

North American Meat Processors Association
 1920 Association Drive, Suite 400
 Reston, VA 20191
 (703) 758-1900

National Pork Producers Council
 P.O. Box 10383
 Des Moines, IA 50306
 (515) 223-2600

U.S. Meat Export Federation
 17th Street, Suite 2200
 Denver, CO 80265
 (303) 623-6328

American Sheep Industry Association
 6911 South Yosemite Street
 Englewood, CO 80112
 (303) 771-3500

NASCO
 901 Janesville Avenue
 Fort Atkinson, WI 53538
 (414) 563-2446
<http://www.enasco.com/>

<u>ITEM</u>	<u>APP.</u>	<u>COST</u>	<u>SOURCE</u>
ID 156 Pork Carcass-Performance Scorecard		---	Ag Communication Service
ID 158 Beef Carcass-Performance Scorecard		---	Media Distribution Center
ID 159 Retail Meat Cut Identification Contest		---	1187 Service Building
V 4-H 9 Beef Carcass Evaluation: 4-H/FFA Meats Judging		\$15.00	W. Lafayette, IN 47907-1187
V 4-H 21 Pork Carcass Evaluation 4-H/FFA Meats Judging		\$15.00	888-398-4636

Meat Evaluation Handbook
 Meat Evaluation Handbook (slides)
 Uniform Retail Meat Identity
 Meat Identification Slide Set
 Wall Charts (Beef, Lamb, Pork)
 Notebook Charts (Beef, Lamb, Pork)
 The Guide to Identifying Meat Cuts
 Backfat Probe
 Beef and Pork Loin Grid*



Customer Service
 NCBA
 444 North Michigan Avenue
 Chicago, IL 60611
 1-800-368-3138
<http://www.beef.org/>

*NASCO is now stocking grids. They are not shown in their catalog, but can be ordered.
<http://www.enasco.com/>

Supplemental/Optional Reference Items

Several video tapes, set up as teaching tools, covering retail cuts of beef and meat cutting of beef, lamb and pork and slides of 121 cuts of beef, pork and lamb identifying characteristics of each cut, accompanying booklet and binder are available through Visual Education Productions by calling 1-800-235-4146; FAX 1-800-243-6398; World Wide Web www.cev-inc.com; Email cev@cev-inc.com.

Many resources and practice judging classes can be found Texas A&M University Meat Science website:
<http://meat.tamu.edu/>.

POULTRY AND EGG JUDGING

- A. A State Poultry Contest committee, composed of Extension Youth Educators and Vo-Ag teachers not directly associated with the poultry contest, will be appointed by the State 4-H Leader and Director of Vocational Agriculture prior to the contest. The duties and responsibilities of the committee will be to conduct the contest and grade and record the scores. All decisions of the Committee will be based on established rules when possible, and where rules do not apply, the decisions of the contest committee will be final.
- B. Procedures for State Contest (Junior and Senior levels)
1. Placing cards will be given to each contestant prior to the start of the contest.
 2. For all individual awards, ties will be broken first by the highest individual score on class 1, then class 2, etc., until the tie is broken. Ties for team awards will be broken by the alternate's score.
 3. Total points for the state event: Juniors = 500, Seniors = 600
 4. Ten minutes will be allowed for each class.
 5. Two minutes will be allowed for each contestant to give oral reasons. Notes may not be used in the reasons room.
- C. State Contest Classes

The area chairpersons have discretionary control of appropriate classes for area contests.

Past Production Total points: 200

Classes 1 & 2

Past production hens of white leghorn or leghorn-type. 50 Points per class. Cuts to be determined by the officials. Total cuts for the 3 pairs should not exceed 15 points on a 50 point basis.

Stations 1b & 1c	Reasons on classes 1 & 2 50 points per class	Senior contestants only
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Market Poultry Total points: 200

Class 3	Dressed Broilers 2 to 6 lbs. 50 points per class	Graded A, B or C Cuts 2-3
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Class 4	Dressed Ducks 6 to 16 lbs. 50 points per class	Graded A, B or C Cuts 2-3
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Class 5	Dressed Turkeys 6 to 16 lbs. 50 points	Graded A, B or C Cuts 2-3
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Class 6	Parts Identification. Parts include the 15 shown in Purdue bulletin 4-H 651, plus drummette (interior wing portion) and flats (center wing portion) 50 points per class (10 parts @ 5 points each)	
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Note: The following updated information should be substituted for the information on cuts and tears contained in Purdue bulletin 4-H 651.

The following are the new limits for exposed flesh for USDA grade A carcasses:

Weight Range		Carcass Portion	
Minimum	Maximum	Breast & Legs	Elsewhere
None	2 lbs.	1/4 inch	1 inch
2	6 lbs.	1/4 inch	1 1/2 inches
6	16 lbs.	1/2 inch	2 inches
16	None	1/2 inch	3 inches

For the purpose of grading ducks, both of the last two joints of the wing will be considered the wing tip. Therefore, any bird with both the drummette and flat intact can qualify for grade A.

<u>Market Eggs</u> Total points: 200		
Class 7	Exterior Egg Grading 50 points	10 eggs graded A, B or Dirty Cuts 2-3
Classes 8 & 9	Egg Candling 50 points per class	Graded AA, A, B or Loss 10 eggs per class Cuts 1-1-3
Class 10	Broken Out Eggs 50 points	10 eggs graded AA, A, B or Loss Cuts 1-1-3

The broken out class should be the last class for each contestant. By waiting until near the end of the contest to break the eggs, all contestants will see them before their condition deteriorates. Due to the reasons rotation, contestants finish other classes at different times. They should report to the broken out class when they have finished all other classes. Contestants have up to 10 minutes to view the eggs from all directions.

D. State Contest Awards

1. Top 3 teams in Sr. 4-H
2. Top 3 teams in FFA
3. Top 3 teams in the Junior Division
4. Top 5 individuals in Sr. 4-H
5. Top 5 individuals in FFA
6. Top 5 individuals in the Junior Division

Only one set of the following awards are to be presented covering both Jr. & Sr. division and both 4-H & FFA.

7. Top 2 teams in Past Production
8. Top 2 teams in Market Poultry
9. Top 2 teams in Market Eggs
10. Top 2 individuals in Past Production
11. Top 2 individuals in Market Poultry
12. Top 2 individuals in Market Eggs

F. References

- Teaching 4-H Oral Reasons EM 4789, Washington State University, 1987. See last four pages of this 4-H/FFA Ag. Judging Handbook.
- Poultry Judging, 4-H 651, available from County Extension office through the Purdue Media Distribution Center, 1187 Service Building, West Lafayette, IN 47907-1187

For further assistance, contact Extension Poultry Specialist, Poultry Building, Purdue University, West Lafayette, Indiana 47907, phone (765) 494-8011.

G. Supplemental/Optional Reference Items

The following items may be obtained from the Purdue Instructional Media Center @ 888 398-4636 or through the County Extension office.

- Practice Poultry Judging Part I, VC 1350, 33 minutes, color, provides practice sessions for judging and learning.
- Practice Poultry Judging Part II, VC 1351, 25 minutes, color, provides samples for practice judging, grading, poultry parts identification, contains official placing and cuts.
- Judging Pullets and Hens, VC 1354, 38 minutes, color, Placement of pullets, examination steps and helpful hints for making competent placement decisions.
- Egg Grading, VC 1352, 50 minutes, color, Individual egg grading for interior and exterior quality. Discussion of grading equipment and parts of egg used for proper grading. Provides examples of differences between grades.
- Introduction to Poultry Evaluation, VC 1355, 20 minutes, color
- Evaluating Ready-to-Cook Poultry, VC 1353, 45 minutes, color
- "Poultry and Egg Judging Simplified" - video tape - VC 1977
Keith Overton presents the fine points of poultry and egg judging using detailed examples. Covers specific areas of grading for both the egg and the live and dressed bird.

Indiana 4-H/FFA Livestock Skill-a-Thon Contest

Location: Boone County 4-H Fairgrounds

Contest Coordinator: Jenise Platt

Purdue Extension

E-mail: plattj@purdue.edu

Rules and Regulations

Team and Contestant Eligibility

1. All 4-H (grades 6-12) or FFA members (grades 7-12) in the state of Indiana are eligible. The contest will be divided into junior (grades 6-8) and senior (grades 9-12) divisions. There will be a separate contest for juniors and seniors. Contestants must participate in the division according to their grade. The top 4-H senior team will be invited to attend the National Skill-a-Thon Contest which will be held in November in Louisville, Kentucky. There is not a National FFA Contest established at this time.
2. Teams may consist of three or four members. All members of a four person team will compete, but the member receiving the lowest overall score will automatically be declared the alternate. The alternate's scores will not be included in any of the team totals, but will be considered in making all individual awards. Teams consisting of three members will not have an alternate and all members' scores will count towards individual and team awards.
3. Registration forms are due to the State 4-H Office by September 15th. Please use the Official 4-H and FFA Career Development Registration form for entry which can be found at <http://www.four-h.purdue.edu/download/Judging/judging.pdf>. Registration fees are \$40.00 per team or \$10.00 per individual. Checks should be made payable to Purdue University. Entries received after September 15th will be charged \$100.00 per team and \$25.00 per individual. **No refunds after September 17.**
4. Contestants must not have competed previously in any official post secondary livestock quiz bowl or livestock quadrathlon contests.
5. This contest covers the understanding and practical application and the principles of Animal Sciences related to beef, sheep, and swine.

Contest Method of Conduct

1. Registration for the contest will begin at 8:30 a.m. with the contest starting at 9:00 a.m.
2. Contestants will be allowed eight minutes to complete each of the eight competition classes. Teams will be allowed twenty minutes to complete the team activities.
3. During the individual competition round, contestants will be divided into groups and will remain with that assigned group throughout the round of classes. While completing the individual competition classes, there will be no conferring between contestants or between a contestant and anyone else except as directed by contest officials. The team competition round will follow the individual competition round.
4. Team members will complete one official answer sheet for each team class representing the combined effort of all team members. Teams will be allowed twenty minutes to complete the group assignment for each class and turn in their answer sheet. During the team competition round of the contest, contestants will only be allowed to confer with their own team members during the time period allowed for each class.
5. Contestants shall not wear any hats.
6. Contestants should bring a blank steno pad, clipboard, and blank paper. Contestants should also use a small pocket calculator (programmable calculators will not be permitted). The contestants may not bring books, notes, pamphlets, or other reference materials into the contest area.
7. Contestants are not to pick up or touch any item that is being identified or evaluated in the individual competition classes.
8. Awards will be presented at the conclusion of the contest.

Awards

Junior Awards

Awards for the top three teams

Award for the top individual

Senior Awards

Awards for the top three teams

Award for the top individual

Top Junior and Senior Individual Overall – Banner

Top Team Overall - Banner

Contest Classes

Individual Classes

1. **Retail Meat Cut Identification:** (50 possible points) From a provided list, identify the uniformly accepted name of ten beef, pork, and lamb retail cuts on display, including the species, wholesale cut from which each retail cut originates and the retail cut.
2. **Livestock Feed Identification:** (50 possible points) Identify the proper name for ten livestock feeds and identify each corresponding nutrient group. Feed samples and lists of feed names and nutrient groups will be provided.
3. **Livestock Breed Identification:** (50 possible points) Identify from photographs or pictures, ten livestock (beef cattle, swine, and sheep) breeds. Seniors must also match the breed with the most appropriate description supplied for each breed.
4. **Meat Judging Class:** Rank two classes of four similar retail cuts of meat (100 possible points). Seniors must also answer five questions for each class (50 points).
5. **Fleece and Hay Judging Class:** (100 possible points) Rank a class of four hay samples with forage analysis information. Rank a class of four samples of fleece.
6. **Livestock Equipment Identification:** (50 possible points) Identify the proper name for ten pieces of equipment used in livestock production. (A list of equipment will be provided.) Seniors must also identify their usage type (ex: breeding).
7. **Quality Assurance Exercise:** (50 possible points) Demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance.
8. **Quiz:** (50 possible points) Complete a quiz concerning the total livestock industry.

Total Possible Individual Points = Seniors: 550 Juniors: 500

Team Classes

1. **Quality Assurance Exercise:** (100 possible points) Demonstrate how to read an animal health product label, calculate dosage rates and withdrawal times, complete a treatment record, be familiar with administration routes, and make responsible management decisions regarding quality assurance.
2. **Animal Breeding Scenarios and Exercise:** (100 possible points) Team members will evaluate a breeding animal scenario and make animal selection decisions based upon performance data to rank breeding animals for use within the situation.

Total Possible Team Points = 200

Total team scores will be determined by adding the three highest individual team members' class totals with the total accumulated from the team competition classes.

SOILS

I. Suggestions for County and Area Soil Judging Contest

A. After contest date and location have been decided:

1. Notify 4-H Department of date and location.
2. Notify all Extension educators, Vo-Ag teachers and coaches in your area.
3. Contact local SCS office for the district conservationist and area soil scientist to assist with location of pit sites and arrangements for digging holes.
4. Check with Farm Credit Services of Mid America, ACA and any other sponsor you may have in mind for possible awards if your area so desires.
5. If applicable for your area contest, make arrangements for a noon meal. Some areas may have a local sponsor who will provide donuts or apples or other nutritious snacks for contestants and coaches.
6. Review the Understanding and Judging Indiana Soils (ID-72) and the 4-H/FFA Ag Judging Handbook (4-H 98). If you have questions, be sure to get these answered before the day of your contest.
7. Notify local news media and make arrangements for volunteer helpers, freeing himself or herself to do overall and last minute problem solving on the day of the contest.

B. Materials needed for the contest:

1. Eight slope stakes (generally 2" x 2", 5 to 6 feet long).
2. Eight to twelve yard sticks.
3. Four one-gallon (or similar) water bottles (one for each hole).
4. Six to seven pieces of poster board (about 10" x 12") for use as hole cards, if you do not use cards available from Media Distribution Center (4H 736A), and 5 to 6 pieces of lath mounting stakes.
5. Three adding machines or calculators for score tabulation.
6. Registration forms, manuals, site cards, and score cards (both agricultural and home site). If you do not have these in your local or area office, check with the State 4-H Department or Media Distribution Center.
7. Ribbon awards for area and state contests are provided by the state soil and water conservation districts and will be brought to the contest by a Purdue specialist.

8. Score cards

- 4-H 394 - Soil Judging Score Card
- 4-H 255 - Home site Score Card

C. Personnel generally required to run contest:

1. Eight to ten tabulators and graders.
2. Four group leaders to guide groups of contestants between holes during the contest.
3. Four hole supervisors to stand by holes, keep them in order and take up completed score cards.
4. Time keeper.
5. Runners to bring score cards to graders.
6. Help for these tasks can come from fellow educators, Vo-Ag teachers, SCS personnel or SWCD supervisors.
7. Contact to arrange for judging or other assistance:

Gary Steinhardt, Agronomy Department
Lilly Hall, Purdue University
West Lafayette, Indiana 47907
Phone: (765) 494-8063

D. Official Judging of Sites

1. Official judging of contest sites is usually done the day before the contest.
2. Arrangements for this are generally made several weeks in advance of the contest through a letter or phone call with Gary Steinhardt.

II. Requirements

- A. Soil pits are judged at four sites, according to scorecard(s) provided by Purdue Cooperative Extension Service. **Two** of the pits will be judged for home site evaluation.
- B. Printed scorecards will be given each contestant on which they will give their evaluation of each site and optically scannable forms may be used at state contest.
- C. Each contestant will have approximately 15 minutes to complete their score card for a given site or area.
- D. All teams must be pre-registered and checked in at the prescribed time (both area and state).
- E. Practice holes at the State Contest will be discussed the day before the State Contest.
- F. Only printed 4-H Slope finders for use with a clipboard may be used as a reference/mechanical device during the State Soils contest.

III. Awards

- A. Ribbons for area and state contests are provided from the State 4-H/Youth Department.
- B. Gold medals for first place and silver medals for second place 4-H and FFA Senior teams and coaches in each area are provided by the Farm Credit Services. Also, gold medals for first place and silver medals for second place for overall Junior Teams in each area are provided by the Farm Credit Services.

C. At the state level, team members and coaches in Senior 4-H and FFA classifications receive awards as follows:

1. Senior Team Awards

Sponsored by Farm Credit Services:

1 st Place FFA, 4-H and Master's Team	Trophy for each team, and FCS special award (portfolio, pen, jacket, etc.)
2 nd Place FFA, 4-H and Master's Team	Trophy for each team
3 rd Place FFA, 4-H and Master's Team	Plaque for each team
4 th Place FFA, 4-H and Master's Team	Plaque for each team
5 th Place FFA, 4-H and Master's Team	Plaque for each team

Sponsored by Purdue Agronomy Club:

1 st Place FFA Team - Traveling Plaque
1 st Place 4-H Team - Traveling Plaque
1 st Place Master's Team – Traveling Plaque

Sponsored by State FFA Association:

1 st Place FFA team - Banner

2. Senior Individual Awards

Top ten individuals will receive ribbons with placing designated.

Top five individuals will also receive, sponsored by Farm Credit Services:

1 st Place FFA, 4-H and Master's Indiv.	Trophy & special award (such as portfolio, pen, jacket, etc.)
2 nd Place FFA, 4-H and Master's Indiv.	Trophy & special award
3 rd Place FFA, 4-H and Master's Indiv.	Plaque & special award
4 th Place FFA, 4-H and Master's Indiv.	Plaque & special award
5 th Place FFA, 4-H and Master's Indiv.	Plaque & special award

3. Junior Team Awards sponsored by Farm Credit Services:

1 st Place Team Overall	Trophy
2 nd Place Team Overall	Trophy
3 rd Place Team Overall	Plaque
4 th Place Team Overall	Plaque
5 th Place Team Overall	Plaque

4. Junior Individual Awards:

Top ten individuals will receive ribbons with placing designated.

5. Coach of the Overall high placing team in the contest will receive a chrome plated spade, sponsored by IAPSC.

IV. Additional Information

A. Material on home site evaluation is also a part of the soil judging contest and is fully explained in Understanding and Judging Indiana Soils (ID-72).

B. Supplementary teaching materials, scorecards and instructions will be issued each year as the materials are improved. This may alter scoring and timing of the contest to some degree. Any changes to other rules will be distributed to all concerned.

- C. If there are any ties, they will be broken by one of the following methods, in order.
1. The highest total team score, including the alternate on the teams.
 2. If a tie remains, total scores for the teams, not including the alternate, for site 1 will be used.
 3. If a tie remains, total scores for the teams, not including the alternate, for site 2 will be used. Site 3, etc. will be used if needed.
 4. In case of a tie for the individual awards, the score on site 1 will be used. Sites 2, 3, etc. will be used if a tie remains.

V. National Contest Rules

A. 4-H and FFA Division Land Judging

1. A maximum of five 4-H and five FFA teams may enter from each state. **Each state may also enter two additional Homesite Evaluation teams provided they meet the criteria of national rule #6. Decision on 6/10/2009 is that these two additional teams will come from the Indiana's Master Division, giving the teams the option in placement order.**

Rule # 6: Any 4-H or FFA contestant who has participated in ANY previous National Land Judging or Homesite Evaluation will not be eligible to participate in this year's Land Judging contest. Contestants may compete in the Homesite Evaluation contest provided they were not a previous member of a champion or reserve champion team in Land Judging or Homesite Evaluation, or was not a champion or reserve champion individual in Land Judging or Homesite Evaluation.

2. Four contestants comprise a team. Scores of the high three team members make the team score. A team of only three members is permissible.
3. Team members will compete for both team and individual prizes.
4. Each state will be responsible for the methods used in selecting the five teams to represent the state. National rules will not allow any contestants participating in the National contest to return to the National contest as a contestant.
5. The above contest rules applying to land judging shall also be applicable to the judging of Home sites.

B. General Rules - National Contest

1. Clipboards, bubble vials, levels, notes, bulletins, etc., must not be used in the contest.
2. The same team or individuals may compete in land judging, home site judging, and pasture and range judging.
3. Contest results submitted to National officials by the tabulation committee shall be final.
4. To qualify for a champion trophy, medal or cash award, the team or individual winning such award must be present at the awards dinner to accept it. If such champion is not present at the awards dinner, the championship trophy and/or medal(s) shall be awarded to the next high-ranking team or individual that is present, the championship cash award shall be forfeited to the donor.
5. No person under the age of 21 nor members of a 4-H club or FFA is eligible to compete in the adult division.

6. See the National Land Judging website for further information <http://www.landjudging.com/>. Usually information is not updated on the website until current year calendar occurs.

VI. Supplemental/Optional Reference Items

- A 48 page manual entitled "Soils Manual for Land Judging" is available through Vocational Education Productions. Call 1-800-235-4146 for details.

Wildlife Habitat Evaluation

1. Purpose

The primary purpose of this event is to increase youth understanding of wildlife ecology and management practices. Several other skills will also be enhanced. These include team work, oral and written communication, decision making, leadership, and interpersonal social skills.

2. State Invitational

- Participant Age – High School age (9th-12th grade) at the time of the event.
- Approximate Date – contest will be held in the Fall (September or October)
- Event Location – near the Purdue University campus
- Activities: Aerial Photos, Wildlife Identification, Wildlife Foods, and Writing a Wildlife Management Plan.
- Equipment: each participant must bring their own pencils and a clipboard. They may bring colored pencils, rulers, drafting aids, colored pencils, rulers, and other drafting aids to assist with writing the management plan.
- The Wildlife Habitat contest is an invitational so no elimination events are required. Pre-registration, with payment, is required. The WHEP CDE website, www.four-h.purdue.edu/WHEP/, gives contest dates and registration deadlines. This event is held in the fall (September or October) each year.

3. Specific Events

Participants complete four activities in the Indiana WHEP CDE. Three of the activities, *Aerial Photos*, *Foods*, and *Wildlife Identification*, are completed by individuals working on their own. The fourth activity, *Wildlife Management Plan*, is done as a team of three or four individuals, working together. These activities are described below.

- **Aerial Photos** (individual event)—Youth use aerial photographs to rank the habitat for eight wildlife species. Four photographs are ranked from the most favorable habitat for a particular species to the least favorable habitat.
- **Foods** (individual event)—Youth identify ten common wildlife foods and the animals that eat these foods.
- **Wildlife Identification** (individual event)—Youth identify fifty items related to wildlife, including species and equipment.
- **Wildlife Management Plan** (team event)—This activity has two parts:
 1. Participants are given landowner objectives for a specific area. The area may include urban, rural, and/or wetland habitats. Teams work together to write a wildlife management plan and sketch how the area should look when managed for specific wildlife species.
 2. Each team gives an oral presentation describing the property to be managed and their wildlife management plan. Presentations are limited to five minutes.

4. Scoring

- Animal ID – 15%
- Foods ID - 15%
- Aerial Photos - 15%
- Management Plan - 50% (Plan, 40%; Oral reasons 15%)

Total = 100%

5. Species and Equipment for Wildlife Identification

The following common Indiana wildlife species will be used in the identification portion of the CDE. The Wildlife ID and Equipment Flashcards (FNR-205) show picture of the preserved species and equipment that youth must identify in the CDE. This publication is available [online](#) and in as [3x5 cards](#).

Birds		
1. American kestrel	13. Hairy woodpecker	25. Red-winged blackbird
2. American robin	14. House finch	26. Ring-necked pheasant
3. American woodcock	15. House sparrow	27. Rock dove (pigeon)
4. Blue-winged teal	16. House wren	28. Ruby-throated hummingbird
5. Broad-winged hawk	17. Mallard	29. Ruffed grouse
6. Brown thrasher	18. Mourning dove	30. Rufous-sided towhee
7. Canada goose	19. Northern bobwhite	31. Song sparrow
8. Common nighthawk	20. Northern flicker	32. Wild turkey
9. Eastern bluebird	21. Northern harrier	33. Wood duck
10. European starling	22. Ovenbird	34. Yellow-rumped warbler
11. Grasshopper sparrow	23. Red-eyed vireo	
12. Great-horned owl	24. Red-tailed hawk	

Mammals		
1. Beaver	7. Eastern gray squirrel	13. Red squirrel
2. Big brown bat	8. Eastern mole	14. Short-tailed shrew
3. Bobcat	9. Meadow vole	15. Southern flying squirrel
4. Coyote	10. Mink	16. Virginia opossum
5. Eastern cottontail	11. Muskrat	17. White-tailed deer
6. Eastern fox squirrel	12. Raccoon	18. Woodchuck
Other Species		
1. American toad	8. Crappie	15. Northern leopard frog
2. Black rat snake	9. Creek chub	16. Painted turtle
3. Bluegill	10. Eastern newt	17. Red-backed salamander
4. Box turtle	11. Fence lizard	18. Snapping turtle
5. Bullfrog	12. Five-lined skink	19. Spring peeper
6. Channel catfish	13. Garter snake	20. Tiger salamander
7. Copperhead	14. Largemouth bass	

The following equipment may be used in the equipment identification.

Equipment		
1. Live trap	7. GPS unit	13. Chemical immobilization darts
2. Hoop net	8. Pesola scale	14. Jabstick
3. Minnow trap	9. Calipers	15. Leg bands
4. Telemetry receiver	10. Snake tongs	16. Rocket net
5. Telemetry antenna	11. Ear tags	
6. Transmitter/collar	12. Pneumatic dart gun	

6. Species for the Wildlife Management Plan and Aerial Photos

The species listed below will be used for the Aerial Photos and Wildlife Management Plan activities.

Species		
1. American Robin	14. Eastern gray squirrel	27. Northern Leopard Frog
2. Beaver	15. European starling	28. Ovenbird
3. Big brown bat	16. Great Horned Owl	29. Raccoon
4. Bluegill	17. House Finch	30. Red-winged blackbird
5. Blue-winged Teal	18. House Sparrow	31. Rock Dove (pigeon)
6. Bobcat	19. House Wren	32. Ruby-throated Hummingbird
7. Box turtle	20. Largemouth Bass	33. Ruffed Grouse
8. Brown thrasher	21. Mallard	34. Song Sparrow
9. Bullfrog	22. Mink	35. White-tailed deer
10. Canada Goose	23. Mourning dove	36. Wild Turkey
11. Common Nighthawk	24. Muskrat	37. Wood Duck
12. Eastern bluebird	25. Northern Bobwhite	
13. Eastern cottontail	26. Northern Flicker	

7. Foods

The wildlife species and foods they eat are given in Appendix C of the publication, Teaching Wildlife Habitat Evaluation ([4-H-992W](#), 2009). This publication is available on the Indiana WHEP website.

8. Resources

- Indiana Wildlife Habitat Evaluation CDE website: www.four-h.purdue.edu/WHEP/. Resources include introduction, general guidelines, scoring, pictures, and training materials (explanations and scorecards, and examples of management plans), including the following:
 - *Teaching Wildlife Habitat Evaluation* (4-H 992-W)
 - *Wildlife Habitat Evaluation, Food Flashcards* (4-H 993-W)
 - *Wildlife ID Flashcards* (FNR-205)
 - *Developing a Wildlife Habitat Management Plan* (4-H 991-W)
- Teaching Oral Reasons: at the back of the *4-H/FFA Judging Handbook*.
- *Wildlife Habitat Evaluation with Aerial Photographs*, 4-H 910, available [from Purdue's Media Distribution](#) or your county [Extension Office](#). This publication has aerial photographs and descriptions of what to look for in the photos.
- The *National 4-H WHEP Handbook*, available on-line only at www.whep.org. This publication has a lot of useful information, but may not include all the species used in Indiana.

9. National Event

4-H Teams: The top 4-H team qualifies to attend the National 4-H Wildlife Habitat Evaluation contest. The national 4-H event is held in late July/early August at various locations across the country. The highest scoring 4-H team from the WHEP CDE may represent Indiana at the national event. If the first place team is unable to attend, the second place team will be offered the trip. Participants must be enrolled in 4-H and aged 14-19. Youth may attend the national contest only once. See the National Website for contest information, www.whep.org.

FFA Teams: The top FFA team qualifies for the National FFA Organization's Environmental & Natural Resources Management Career Development Event. This event is held during the National FFA Conference.

Check the Indiana WHEP CDE website, www.four-h.purdue.edu/WHEP/, for dates (contest and registration) and a registration form. Note that payment is required with the registration form. Registration forms are also available on the 4-H website (www.four-h.purdue.edu, then search for forms) and the Indiana FFA website, www.indianaffa.org. Note that this is an invitational contest and county Extension Educator signatures are not required on the registration form.

TEACHING ORAL REASONS

Making good choices and explaining them to others can build a young person's self-confidence. Selecting the best of four comparable items sharpens the decision-making skills of a member. Giving reasons for his or her selections stimulates habits of careful and thorough thinking.

As a coach, you can help your members learn to judge and to give oral reasons by using the practical tips in this bulletin.

What Are Oral Reasons?

A good set of oral reasons is an organized statement, which compares the values of items judged by the member. Oral reasoning statements must be clearly stated in proper terms and must justify the placings assigned by the member.

In order to develop sound oral reasons, the judger must have a mental picture of the class being judged. This method is much more effective than memorizing reasons. It develops the imaging power of the brain as well as the ability to make comparisons, then uses both to explain the member's placing of the original class.

Suggested Steps For Teaching Oral Reasons

1. Help members develop a working knowledge of accepted terminology. Terms and their meanings apply to real specimens. If members tend to over-use terms when giving reasons, review the range of appropriate terms with them.
2. Explain the accepted oral reasons procedure using the "Sample Format for Reasons" section of this bulletin.
3. Set up a judging class so that members may practice giving oral reasons. Encourage members to use the imaging method mentioned above.
4. Offer comments tempered with plenty of praise. Too much criticism is obviously not good for building a member's self-confidence. Tape recording or videotaping provides an opportunity for members to critique themselves.
5. Provide opportunities throughout the year for members to present oral reasons.

Basic Elements Of Oral Reasoning

The first task in judging is for members to place the items in the class in order. Members should make brief written notes that will help them recall a mental picture of the class. While members are waiting to give reasons to the oral reasons judge, they can organize their thoughts and practice giving reasons out loud.

There are four important and basic criteria in every good set of oral reasons. Oral reasons judges assign the following percentage values to each of the four criteria:

Knowledge of Subject – 40%
Use of Appropriate Terminology – 25%
Presentation – 20%
Organization – 15%

Knowledge of subject is the most important part of giving reasons and is worth the greatest number of points. A member needs to see major things in the class correctly and discuss them accurately and completely. The oral reasons judge will always weigh accuracy more heavily than the other three basic criteria. Therefore, a persuasive and pleasant sounding set of reasons without a high degree of accuracy is of little value.

Use of appropriate terms is important in presenting a set of reasons. When learning terminology, members should first become familiar with terms in the project materials that are common and

conventional. Many slang phrases used by people in industry are not considered appropriate by oral reasons judges. With practice, the reasons presentation becomes clear, logical and to the point.

The presentation is important. If reasons are presented well, the listener more clearly understands the member's logic.

When giving oral reasons, members should:

- Stand erect in front of the judge.
- Establish eye contact with the judge.
- Be neat and clean.
- Avoid chewing gum or wearing a cap or hat.
- Present the set of reasons in two minutes or less.
- Speak loud enough to be understood without shouting or talking too rapidly
- Fluctuate the tone of voice, so important points are emphasized.
- Use correct enunciation, pronunciation, and grammar.
- Use comparative terms when justifying the placings.

Organization helps the judge hearing the reasons follow what is being said. A well-organized set of reasons presents major differences in general terms first. Then, to be more complete, the general terms are broken down into more specific terms. A well-organized set of reasons is easier to deliver than a poorly organized set, and usually has fewer hesitations. Examples of organized reasons are included in this publication.

Based on a fifty-point scoring system, scores translate as follows:

50 = perfect	25-34 = fair
45-49 = excellent	< 25 = needs much improvement
35-44 = good	

When using the form below to practice, it may be best not to write out complete sentences— just thoughts and words so you will easily recall the items. When discussing each class, first compare then grant only if the second item is better than the first.

Sample Format For Reasons

The organization of a set of reasons determines how easy the reasons are to follow. The following system is used in Plant & Animal Sciences because it is both logical and clear. Remember, the class should be compared, not described.

Suggested Training Form For Organizing Oral Reasons

I place this class of _____, _____,
(name of class)
_____, _____, and _____.

I place _____ over _____ because:

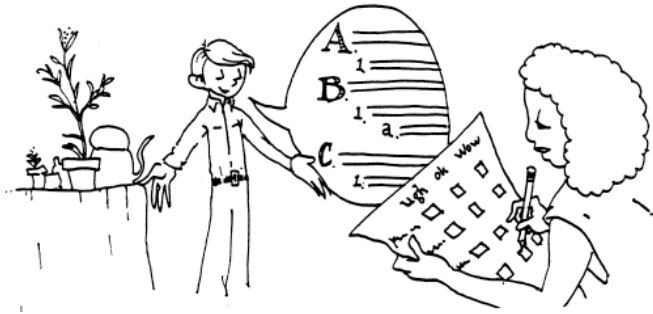
Compare
Grant

I place _____ over _____ because:

Compare
Grant

I place _____ last because: (Statements of fact and comparison to the other three items).

For these reasons I place this class of _____, _____,
_____, _____, and _____.



A class of four is divided into three pairs: a top pair, a middle pair and a bottom pair. The basic organizational outline for an entire set of reasons and comments on specific steps (placing 1-2-3-4) follows.

- Step I: Give name of class and placings. Example: "I placed this class of _____ 1-2-3-4."
- Step II: Make some general comments about the class (optional). Point out the most important points of your top placing.
- Step III: Give reasons in comparative terms for placing 1 over 2 in the top pair. Begin with important points and follow with details.
- Step IV: Each item in a class has some good points. Tell how 2 is better than 1. Example: "I grant (concede) that 2 isthan 1. End a "grant" statement with "than" plus a number.
- Step V: Repeat steps III & IV comparing the next two pairs, one pair at a time. Example: "In the middle pair, I placed 2 over 3 because" and "In the bottom pair I placed 3 over 4 because...."
- Step VII: Conclude by saying "These are my reasons for placing this class _____ 1-2-3-4. Are there any questions?"

Example Of Oral Reasons For A Foods And Nutrition Class

I placed the measuring liquids class 2-1-4-3.

I placed the glass cup first because it is recommended for measuring liquids. It has a spout for easy pouring and clear markings for easy reading. Because it is clear, the amount of liquid in the cup is easily read at eye level.

It is easier to accurately measure liquids using a glass measuring cup than with an aluminum cup because of the clear markings on the glass cup. It also is easier to pour from the glass measuring cup because it has a spout and the aluminum cup doesn't.

I placed the aluminum cup second because it must be filled to the brim to measure accurately. It would be difficult to pick up the aluminum cup and move it without spilling. The aluminum cup is better than my third choice because its shape is not changed by temperature.

I placed the plastic measuring cup third because it could melt or become misshapen if hot liquids were being measured. Also, plastic sometimes gives an odor to liquid. Measurement in a plastic cup is likely to be more accurate than using a regular tea or coffee cup which could vary in size. I placed the regular tea cup fourth because it does not always measure accurately. Tea and coffee cups vary according to their patterns so accurate measurement would be impossible. I grant that 4 is better than 3 because it would not give an odor to the liquid as the plastic cup might. For these reasons, I placed the measuring liquid class 2-1-4-3.

Example Of Oral Reasons For An Animal Science Class

I placed this class of four-year-old Holstein cows 2-4-3-1.

I placed 2 over 4 because she is superior in general appearance and has the best mammary system in the class. She blends more smoothly throughout, moves more attractively, and walks more correctly on her rear legs. I concede that 4's head shows more breed character and that 2 is plain-headed.

I placed 4 over 3 based on dairy character and body capacity. Four shows greater evidence of milkiness, is sharper over the withers and shows less thickness through the neck and in the thigh region. Four also is a deeper and longer-bodied cow than 3. She shows greater depth and ore spring of rib.

I placed 3 over 1 because her mammary system shows more quality and has a firmer udder attachment. Her udder is level and is more balanced than one's. Three is also a taller, more open-framed cow than is 1.

I placed 1 last because she has a meaty, tilted udder and long, pointed teats that strut out.

These are the reasons I placed the class of Holstein four-year-olds 2-4-3-1.

Serving As An Oral Reasons Judge

You may be asked to serve as an official oral reasons judge. In this capacity, your responsibility is to evaluate a member's presentation of oral reasons. Age-graded oral reasons scorecards for juniors; intermediates and seniors are listed in EM2778 4-H Projects and Publications. You may order a supply from your County Extension office.

The oral reasons judge should consider the member's:

- Ability to make accurate, clear-cut comparisons, which justify placings.
- Knowledge of the essential qualities and standards required in the class.
- Ability to organize ideas and to state them in a clear-cut, brief manner.
- Use of a varied, descriptive vocabulary and correct grammar.
- General poise and confidence.

An incorrect placing does not mean reasons will automatically be scored lower than if the placing was correct. The member may assign importance to a different aspect of the item than the judge does. However, point deductions should be made for inaccurate statements to discourage members who memorize reasons rather than judge each class separately.

Conclusion

Helping young people learn to clearly express their ideas is a rewarding part of being a 4-H leader. Use the materials in this guide to help your 4-Hers learn to make decisions and to state their opinions effectively.

Have fun teaching oral reasons! If you need more information about judging, refer to Learning Through 4-H Judging, EM4647.

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INDIANA ORAL REASONS CRITIQUE

Modified from the National Horse Judging Team Coaches' Association flyer "Guidelines for Reasons Judges."

Oral reasons should clearly compare animals and justify placing of the class. They may not exceed two minutes in length. Placing score should not dictate oral reasons score.

Characteristics of Good Reasons

There are at least five major characteristics to consider when scoring reasons.

	Excellent	Good	Average	Needs Improvement
ORGANIZATION	_____	_____	_____	_____
Introduction				
3 comparative paragraphs				
Ending				
Descriptions only - major fault.				
RELEVANCY/KNOWLEDGE	_____	_____	_____	_____
The big significant facts				
Observations fit the class				
Canned reasons - major fault.				
ACCURACY/KNOWLEDGE	_____	_____	_____	_____
True statement; regardless of placing				
Inaccurate statement - major fault.				
TERMINOLOGY	_____	_____	_____	_____
Commonly used by horsemen				
Comparative, relative to class				
Unfamiliar terms or parts - major fault.				
PRESENTATION	_____	_____	_____	_____
Confident, fluent, convincing				
Correct grammar				
Meek or arrogant - major fault.				
JUDGES COMMENTS:				SCORE: _____



(Circle one)

Excellent	44-50
Good	38-43
Average	30-37
Needs Improvement	20-29
Incomplete	below 20

XVI. THANK YOU NOTES

Thank-you notes are a polite way of expressing gratitude, but more importantly they are an effective means of building strong relationships and creating good will for you and your organization.

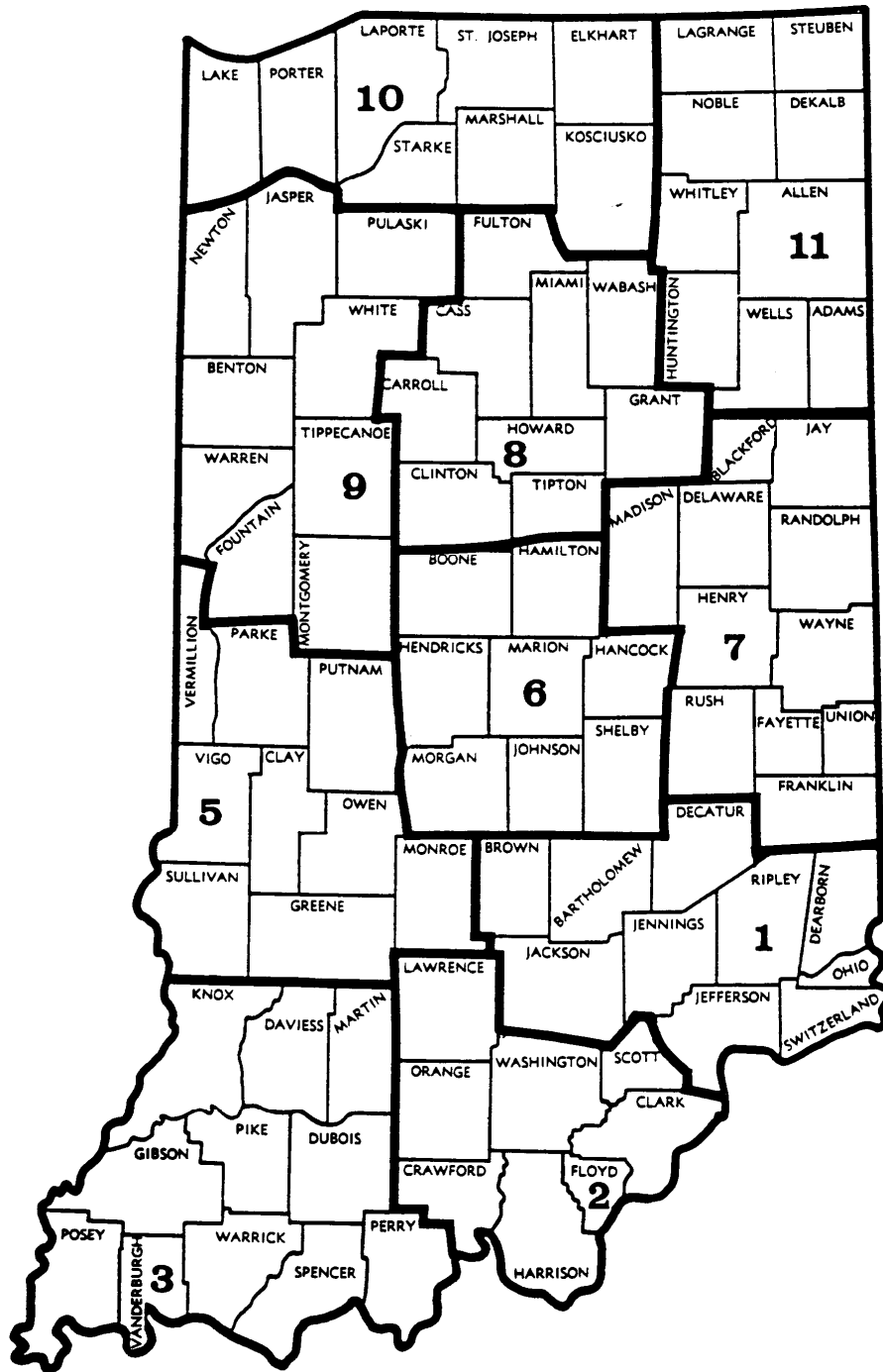
It is surprising how many times those deserving of special thanks are forgotten. Unfortunately, individuals sometimes stop doing good deeds because they have never received a thank-you note for their generosity of time, money and support.

Writing a thank-you note is an expression of one's personality, and each individual will express thoughts differently—thus, developing a distinctive style of writing. While there is not a ring or wrong way to write a thank-you letter, there are a few guidelines to follow:

- ✓ Write a thank-you on nice note paper
- ✓ These notes should be handwritten and should become an automatic reaction to the nice things people do for you.
- ✓ Always find out the person's name if you don't know. It is less personal if you send a thank-you letter to "Dear Sir or Dear Madam."
- ✓ Tell the individual what you are thanking them for.
- ✓ Explain what their help or sponsorship meant to you.
- ✓ Make it a personal note so the person receiving it feels you are sincere about the thank-you. Believe it or not, the receiver of a thank-you can tell if your mom is standing over you forcing you to write this note.
- ✓ Short and simple thank-you notes are best.
- ✓ The stilted, long-winded style of writing thank-you notes makes you sound insincere.
- ✓ Always write or print a personal hand-written message. Never just sign a printed thank-you card.
- ✓ Deliver the card in person if it goes to a local person. Baked goods or craft items are the nice touch and are always appreciated by the recipient.
- ✓ Learn to write other kinds of personal notes to reinforce your personal friendships and build your network of people. React to what happens to people. Write to congratulate someone on good news and console someone on bad news.
- ✓ Remember, the written word puts your friendship and appreciation on record.



XVII. EXTENSION PROGRAM AREA MAP
Purdue Cooperative Extension Service Program Areas



It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.