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FFA makes a positive difference in the lives of students by developing their potential for **premier leadership, personal growth and career success** through agricultural education. National FFA Online, www.ffa.org, FFA's Internet web site, can provide information about the National FFA Organization.

Prepared and published by the National FFA Organization. The National FFA Organization is a resource and support organization that does not select, control or supervise state association, local chapter or individual member activities except as expressly provided for in the National FFA Organization Constitution and Bylaws. The National FFA Organization affirms its belief in the value of all human beings and seeks diversity in its membership, leadership and staff.

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GENERAL INFORMATION

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The National FFA Career Development Events are educational activities organized by the National FFA Organization and sponsored through the National FFA Foundation and special industry sponsors.

This is your copy of the official rules and regulations for National FFA Career Development Events for 2006–2010. Please retain this manual throughout the five-year period. Refer to the Local Program Resource CD-ROM or FFA online for the most up-to-date edition of the Career Development Event Handbook.

CDE Event	Superintendent	Phone	E-mail
Agricultural Communications	Dr. Cindy Akers	806-742-2816	cindy.akers@ttu.edu
Agricultural Issues Forum	Dr. Jerry Peters	765-494-8423	peters@purdue.edu
Agricultural Mechanics	Dr. Stephen Poe	523-317-6418	spoe@ag.arizona.edu
Agricultural Sales	Mr. Troy Selman	936-661-9195	TLselman@gmail.com
Agronomy	Mr. Harold Brown	614-836-7694	hbrown@synagro.com
Creed Speaking	Mr. Greg Beard	805-756-2402	gbeard@calpoly.edu
Dairy Cattle Evaluation	Mr. Jim Ertl	651-582-8347	jim.ertl@state.mn.us
Dairy Cattle Handlers' Activity	Ron Tilford	513-293-4180	rtilford2@cinci.rr.com
Dairy Foods	Dr. Freddie Scott	479-575-2035	FScott@comp.uark.edu
Environmental and Natural Resources	Mr. Billy Sumrall	601-785-9602	gbbbeef@bellsouth.net
Extemporaneous Public Speaking	Mr. Dennis Wallace	360-458-6543	dennis_wallace@ycs.wednet.edu
Farm Business Management	Dr. James Casey	318-342-1750	jcasey@ulm.edu
Floriculture	Mr. David Kercheval	254-854-2952	KerchBar3@aol.com
Food Science and Technology	Dr. Lori Moore		LMoore@aged.tamu.edu
Forestry	Mr. Marion Fletcher	501-682-2561	marion.fletcher@arkansas.gov
Horse Evaluation	Mr. Joe Cunningham	918-479-6221	jcunningham@lg.k12.ok.us
Job Interview	Ms. Linda Story	270-733-4173	ljstory@bellsouth.net
Livestock Evaluation	Dr. Fred Rayfield	229-896-2293	frayfield@cook.k12.ga.us
Marketing Plan	Mr. John Jeans	503-999-6914	jjeans@astoria.k12.or.us
Meats Evaluation and Technology	Dr. Randy Harp	254-968-9212	harp@tarleton.edu
Nursery/Landscape	Dr. Alan McDaniel	540-231-5781	alanmcd@vt.edu
Parliamentary Procedure	Dr. James Connors	614-292-3386	connors.49@osu.edu
Poultry Evaluation	Dr. Jason Emmert	479-575-3595	jemmert@uark.edu
Prepared Public Speaking	Mr. Dustin DeVries	703-727-9866	ddevries@falconpro.net

PHILOSOPHY FOR NATIONAL FFA CAREER DEVELOPMENT EVENTS

Students are important customers of agricultural education and FFA who recognize quality and value in products and activities. When provided an opportunity to fashion their educational experiences, they generally make wise decisions based on needs. Perceptions, images and opinions of others influence students. They value change based on their perceived personal needs as well as the needs of others. They sometimes value change for the sake of variety. Adults are concerned about the experiences of students and want to help organize experiences that will meet the future needs of students while accomplishing the purposes of agricultural education and the National FFA Organization. The National FFA Organization should assume the leadership role in developing and continuously improving relevant FFA career development events. Although the National FFA Organization should be aware of the needs of state associations and should react to those needs, it should help initiate opportunities that reflect relevant and emerging technology. National FFA Career Development Events should be developed with significant input from FFA members, teachers, partners, respective industry sponsors and others involved in agricultural education.

National career development events should reflect instruction that currently takes place in the entire agricultural education program, including classroom instruction, laboratory instruction, individualized instruction, and/or supervised agricultural experience. However, it is appropriate for the national organization to develop career development events and awards that stimulate instruction in emerging areas that reflect both current and future community, national and global work force needs. The authority for insuring the relevance of an FFA

activity is ultimately vested in the National FFA Board of Directors.

The national organization should promote career development events. Career development events that include team activities should be based on cooperation and teamwork while recognizing the value of competition and individual achievement. The role of career development events is to motivate students and encourage leadership, personal growth, citizenship and career development.

Students should be recognized for achievement in career development events. Quality standards should be used as a basis for achievement. The national organization should ensure that the recognition is appropriate and meaningful. Recognition for achievement should be reflective of the total effort required by the chapter/team/individual and should take place at all levels of participation.

The National FFA Organization shall encourage accessibility and provide opportunities for achievement and recognition for students with diverse backgrounds. High expectations should be consistently communicated to those who are involved in career development events and awards.

GENERAL RULES AND OFFICIAL POLICIES

Violations of any of the following rules may be grounds for the event superintendent to disqualify the participants.

National FFA staff and event superintendents will use the published rules and procedures to organize and implement the National FFA Career Development Events. Event activities may not be conducted, modified or substituted due to lack of necessary materials, expertise or extreme impact to event budgets. Every effort will be taken to

maintain the quality and integrity of the event. In this case notification will be provided at the team orientation meeting. Teams that qualify to compete will be mailed the current format for the specific event in a team orientation packet prior to the convention for which they have qualified.

Team Activities

The primary goal of career development events is to develop individual responsibilities, foster teamwork and promote communications while recognizing the value of ethical competition and the value of individual achievement. Where appropriate team activities will be included that requires two or more members from one chapter working cooperatively. Career development events and awards are intended to be an outgrowth of instruction.

Career development events should:

- include problem solving and critical thinking.
- promote an appreciation for diversity by reducing barriers to participation.
- promote new directions and focus on future needs of members and society.
- include cooperative activities, where appropriate.
- encourage broad participation among members and recognize excellence within levels of experience.
- recognize individual and team achievement, develop general leadership and recognize levels of ability.
- provide local recognition for superior performance at the state and national level.

Eligibility of Participants

1. Each participant must be a current bona fide dues paying FFA member in good standing

with the local chapter, state FFA association and the National FFA Organization at the time of his/her certification and at the time of the national career development event in which he/she participates.

If the participant's name is not on the chapter's official roster for the years in which the dues were payable to the National FFA Organization, a past due membership processing fee of \$25, in addition to the dues must be paid **prior** to certification.

2. The participant, at the time of his/her certification as a national team member:
 - a. must be a *high school* FFA member, (a graduating senior is considered eligible to compete in state and national career development events up to and including his/her first national convention following graduation). (High school refers to grades 9–12.)
 - b. must have qualified as either a 7th, 8th or 9th grade member to compete in the creed speaking event.
 - c. while in school, must be enrolled in at least one agricultural education course during the school year and/or follow a planned course of study; either course must include a supervised agricultural experience program, the objective of which is preparation for an agricultural career.

The National FFA Constitution provides flexibility to meet the needs of students enrolled in non-traditional programs. For this purpose a student needs to be enrolled in at least one agricultural education course during the year they qualified for the event.
 - d. must have qualified as a state representative in a respective career development event; if he or she moves to a

different chapter or a different state, they may be allowed to compete in the national event with the school they qualified with during the qualifying year. Certification forms submitted to the national FFA will be the list that will be accepted.

3. A student may not participate more than once in the same official National FFA Career Development Event. No student may participate in more than one National FFA Career Development Event each year.
4. CDE participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.

Official Dress

1. Participants are expected to observe the National FFA Code of Ethics and the Proper Use of the FFA Jacket during the career development events. (Please see the latest edition of the Official FFA Manual.) Official dress is highly recommended for all participants where appropriate and is required for the awards presentation and recognition.

SELECTION AND CERTIFICATION OF STATE TEAMS

1. Each state team may be composed of four members except for agricultural communications, agricultural issues, marketing plan and parliamentary procedure. The members of a state team must be from the same chapter. Members must qualify in the career development event in which they are to participate at the national level. With extenuating circumstances a teacher may substitute another

student from the chapter who may not have participated at a state qualifying event.

2. Each team will be composed of the number of members determined by the specific event committee. See chart on next page for number of team members and number of scores used to comprise the team score.
3. Teams must be selected at a state or interstate career development event held between the immediate previous National FFA Career Development Event Convention and prior to the National FFA Convention in which they are participating. States that qualify more than one year out must request and submit a written waiver for approval at least 110 days prior to the national event.
4. Each state will submit a team declaration form by June 1st prior to the national FFA convention. A \$25 entry-processing fee will be charged for participation in each declared event with the exception of the Dairy Cattle Handlers' Activity. Processing fee must be paid in conjunction with certification of each team.
5. The state supervisor of agricultural education or the executive secretary must certify that participants are eligible. If an ineligible student participates in any career development event, the member will be disqualified and may result in the disqualification of the team as well.
6. All students must be certified by the designated deadline. Once original certification has been completed, no member may be added without first deleting a member.
7. Certification forms will be made available each year to the state supervisor of agricultural education and the executive secretary through the National FFA CDE website and National Agricultural Education Inservice CD-ROM. States must certify participants to the National FFA Organization 110 days

**OFFICIAL DRESS RECOMMENDATIONS, NUMBER OF PARTICIPANTS
AND NUMBER OF SCORES FOR TEAM TOTAL**

Event	Official Dress Appropriate	Number of Participants Allowed(per team)	Number of Scores for Team Total
Agricultural Communications	Yes	5	5
Agricultural Issues	Optional	3-7	Team Score Event
Agricultural Mechanics	No	4	Top 3 Scores
Agricultural Sales	Yes	4	4
Agronomy	Yes	4	4
Creed Speaking	Yes	1	N/A
Dairy Cattle	Yes	4	Top 3 Scores
Dairy Handler	Yes	1	N/A
Dairy Foods	Yes	4	Top 3 Scores
Environmental and Natural Resources	Yes	4	4
Extemporaneous Speaking	Yes	1	NA
Farm Business Management	Yes	4	Top 3 Scores
Floriculture	Yes	4	4
Food Science and Technology	Yes	4	4
Forestry	No	4	Top 3 Scores
Horse	Yes	4	Top 3 Scores
Job Interview	Yes	1	N/A
Livestock	Yes	4	Top 3 Scores
Marketing Plan	Yes	3	Team Score Event
Meats Evaluation and Technology	No	4	Top 3 Scores
Nursery/Landscape	Yes	4	Top 3 Scores
Parliamentary Procedure	Yes	6	Team Score Event
Poultry	Yes	4	Top 3 Scores
Prepared Speaking	Yes	1	N/A

prior to the start of the national convention. The names of all participants may be submitted after the 110 day certification deadline, but must be in the National FFA Center at least ten (10) business days prior to the career development event in which they are to participate. Any additions or deletions of participants less than ten (10) business days prior to the career development event must be done at the national FFA convention within one (1) hour prior to the time of each respective career development event team orientation meeting.

8. To certify at the convention, advisors are to complete an on-site add/delete form. Membership of those participants listed on the on-site add/delete form will be verified after the convention. If at that time, a member is found to be inactive, the team may be disqualified, if the member who is in question had an effect on the team placing. Regardless, the member in question will be disqualified. These participants must also meet all other requirements of eligibility printed in this handbook. When possible membership checks will be done at the time the on-site add/delete form is processed on site. If at this time the participant is not a member the chapter advisor will have the opportunity to pay membership processing fees, state dues and national dues.
9. Each member participating in a National FFA Career Development Event must submit the proper Waiver, Release of Liability and Consent to Medical Treatment Form. The form must be sent to the National FFA Center within 30 days prior to the event. If a team does not qualify for participation in the national event until after this deadline, the waiver form must be submitted with the certification form. Participants who do not submit this form will not be allowed to participate.

National FFA staff highly recommend that all liability waiver forms be submitted with the event certification form prior to the certification deadline. Liability waivers must be submitted with all add/delete forms.

Emergency Conditions

1. Under emergency conditions, a state team participating in a National FFA Career Development Event may be made up of less than the required members. States must still certify teams prior to the national FFA convention, but fewer than the required number could compete if an emergency condition such as illness, death in the family or an act of God would occur. Those individuals competing would still be eligible to qualify for individual awards.
2. Event committees will strive to divide teams into groups so that no two participants from a team will be in the same group. In any case no two members will be placed side-by-side.

Disqualification

1. Any communication, verbal or non-verbal, between participants during a career development event will be sufficient cause to eliminate the team member involved from the career development event. The only exception to this would be communication between team members during the team activity portion of a given career development event.
2. Teams or participants arriving after the career development event has begun may be disqualified or penalized.
3. Any assistance given to a team member from any source other than the career development event officials or assistants will be sufficient cause to eliminate the team from the career development event.

4. Event superintendents may stop any participant if they deem their manner to be hazardous either to themselves or others. Such stoppage shall deem the individuals disqualified for that section of the career development event.
5. CDE participants who start an event and do not complete the event without notifying event officials at the time of departure will be disqualified. This can affect the overall team rank and position. In some events this will also disqualify the entire team.
6. Participants will not be allowed to utilize personal electronic communication devices, other than those approved by the event officials, during the entire course of the event. Participants who access personal electronic communication devices without prior approval of the event officials will be disqualified.
7. No team, participant, advisor or coach shall visit the event facilities from September 1 to the end of the event. Any team, participant, advisor or coach reported and proven to do so will cause the elimination or disqualification of that team from the national event.
8. Assess a penalty of 10% of the total points allotted for the written documents post-marked after the postmarked deadline in the following events; Agricultural Communications, Agricultural Issues, Job Interview, Marketing Plan and Prepared Public Speaking. If the document is still not received seven days after the postmarked deadline, the team/individual may be subject to disqualification.

Waiver of FFA Rules

Any local chapter seeking a wavier of a National FFA Board Policy or Procedure must submit in writing to the chapter's state FFA association office. If the request is approved at the state level,

it must be forwarded, under the signature of the state FFA advisor or executive secretary, to the national FFA advisor. After study by the appropriate staff, the wavier request must be submitted to the national FFA staff at least 30 days prior to the scheduled event or due date for which the waiver is requested. This policy does not supersede any current FFA policy for appeals already established for a particular FFA program.

Rules Committee of the National FFA Award, Recognition and Career Development Events Advisory Committee

1. The committee will meet only when needed at the national FFA convention and will make all final decisions on interpretation of the rules and regulations of the National FFA Career Development Events. The committee will be chaired by the National FFA Awards, Recognition and Career Development Events Advisory Committee chairperson who will in turn appoint a representative of the each of the following organizations: National Association of Supervisors of Agricultural Education (NASAE), National Association of Agricultural Educators (NAAE) and the American Association for Agricultural Education, (AAAE). The program manager responsible for career development events will also serve. All five committee members will have one vote each.
2. The rules committee will resolve detailed written appeals associated only with scoring errors. Official judges' decisions are final. The announced results are the official results and awards may be duplicated as a result of the appeal. The written appeal must be filed with the education division staff responsible for career development events within seven (7) calendar days of the results announcement and accompanied with a \$50 filing fee. The fee will be returned if the appeal is justified.

Additional Operational Procedures and Policies

Check-in

Participants will report at the national FFA convention as indicated in the annual team orientation packet. Dates, hours and location will be sent annually to the state supervisor of agricultural education and to each team advisor in the team orientation packet. All participants will be given an identification number by which they will be designated throughout the event.

Assistants, Group Leaders and Officials

Each state agricultural education department is encouraged to provide staff and students to help administer and conduct specific National FFA Career Development Events. *States with prepared, extemporaneous and creed speaking participants must provide a judge.* States entering a team may recommend a person or persons to serve as an assistant in the career development event in which a team will participate. These persons may be supervisors, teacher educators, teachers of agriculture or other qualified individuals. A person designated as an assistant, group leader or official for a career development event must neither be the coach, advisor or agricultural instructor of a team/individual in that same career development event; nor shall they have had any direct part in training/coaching the team/individual in preparation for the event after qualification for nationals has occurred. If an individual wishes to train/coach their team/individual, they must excuse themselves from the committee and event preparation for that convention year.

Special Need

Accessibility for all students—All special needs requests and appropriate documentation as outlined in the special needs request procedure must be submitted with appropriate career

development event certification form by certification deadline. National FFA staff and the event superintendent will be responsible for scheduling assistance from a different state association to assist participants.

Scoring

Continuous revisions of scoring sheets, due to computer scoring, will be necessary. Copies of any revised sheets will be sent to the state supervisor/executive secretary of agricultural education 60 days prior to the career development event.

TEAM AND INDIVIDUAL AWARDS

The ranking of teams and individuals in each of the career development events will be on the basis of three logical groups within the total range of scores. These groups will be designated as gold emblem, silver emblem and bronze emblem. Teams and individuals participating in each of the career development events will be rated gold, silver and bronze emblem through a specific procedure that will be predetermined. However, officials will honor natural breaks in scores. In the final written announcement of results, teams and individuals will be ranked from top to bottom in the order of their placing. Awards will be distributed to the winning teams and individuals at award programs following the completion of the career development events.

1. All awards will be provided by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.
2. The team having the highest ranking in each career development event will receive an award and members will receive individual high team awards provided they are present at the time of the awards ceremony.

3. The high individual in each of the National FFA Career Development Events will be announced at the time the awards are distributed and presented with a special award.
4. Results of all National FFA Career Development Events will be released through the education division, National FFA Organization office at the appropriate event award ceremonies.

Career Development Event Scholarships

1. Scholarships may be awarded in the National FFA Career Development Events, *as funding is available*.

Scholarships will be held for a full year beyond the student's graduation date. If the scholarship is not requested within one year after graduation from high school, the scholarship will be forfeited. Information on availability of scholarships will be sent annually along with the "Program for National FFA Career Development Events" to state participating teams and state agricultural education officials. Only one career development event scholarship may be awarded per student per year.

2. Additional scholarships may be available to top FFA members who have participated in National FFA Career Development Events at local, state and/or national levels through the National FFA Collegiate Scholarship Program. Students must meet the criteria for each specific area as outlined in the national scholarship application and complete the application that is mailed to each chapter in order to be considered for these scholarships.
3. Farm Business Management Career Development Event Fellows Program is for the advisors of the top two National FFA Farm Business Management Career Development Event teams. The advisor of

the first place team will receive a \$1,500 award and the advisor of the 2nd place team will receive a \$1,000 award. The advisors may use the awards for **a)** in-service or continuing education **b)** farm business management instructional materials **c)** a scholarship fund for the local FFA chapter. The Fellows awards will be awarded on an "as available" basis. Fellows awards may only be awarded to a FFA advisor for a total lifetime amount of \$2,500. These awards are provided by the National FFA Organization through National FFA Foundation sponsorship by the career development event sponsor.

Written Tests

All written tests used in National FFA Career Development Events will be available for sale through the National FFA Catalog effective the January following each career development event. Please request Item NCQ (year).

Career Development Events Additions/Deletions

- a. National FFA staff in cooperation with the National FFA Board of Directors is expected to be proactive in developing new or initiating changes within existing career development events to ensure they meet the needs of FFA members.
- b. Three years following the initiation of a new career development event, 15 states should be participating and 26 states should be participating after the next three-year period in order to retain the event at the national level.
- c. In addition, if 15 state supervisors/executive secretaries develop a proposal for a new career development event, the national FFA staff will conduct a study for the validity of the career development event and make a recommendation to the National FFA Board of Directors. Representatives of these states

must be from each of the FFA regions. The same process may be used to eliminate a national career development event.

- d. The national organization will certify National FFA Career Development Event winners for international competition when states request, with the understanding that the state team will provide their own travel expenses.
- e. The National FFA Board of Directors and national officers shall approve all changes in the general plan, rules and methods of selecting winners.

NATIONAL FFA AWARD, RECOGNITION AND CAREER DEVELOPMENT EVENTS ADVISORY COMMITTEE

Purpose: To advise the National FFA Board of Directors on issues impacting both National FFA Career Development Events and Awards to ensure:

- 1. all activities are consistent with industry needs.
- 2. all activities are available to all members.
- 3. all activities are conducted openly, fairly and in a quality manner.
- 4. cooperation among various activities occurs, to the degree possible, to promote the interconnectedness of agriculture (i.e. forestry and agricultural mechanics or farm business management and dairy or livestock) and agricultural education (classroom, SAE, FFA).
- 5. new and innovative activities are being put forward for consideration.
- 6. as many students as possible have the opportunity to participate.

- 7. a constant process of local advisor in-service on proper use of these activities as tools for learning is being championed.
- 8. all activities are operated consistently with national FFA board policy.
- 9. activities are conducted within available budgets approved by the FFA board and, if appropriate, FFA foundation board.

Membership

- 1. Two members of the National FFA Board of Directors, selected by the board, one of which will be a state supervisor (preference may be given for the second position to be held by the teacher acting as the USDE representative).
- 2. Two members, who are agricultural education instructors, selected by National Association of Agricultural Educators, (NAAE) through a process of their choosing.
- 3. Two members, who are state staff, selected by National Association of Supervisors of Agricultural Education, (NASAE) through a process of their choosing.
- 4. Two members, who are teacher educators, selected by American Association of Agricultural Education, (AAAE) through a process of their choosing.
- 5. Two FFA members who are or were delegates selected by the FFA national officers through a process of their choosing.
- 6. One member who is a career development event superintendent selected by the CDE superintendents through a process of its choosing.

Consultants

The current superintendent of each FFA career development event area will serve as a consultant.

Term

Members serve a three-year term except for the two FFA member representatives who will serve a one-year term.

Chair

The chair of the national advisory committee on awards and career development events will be the state staff member selected by the National FFA Board of Directors.

Meeting Schedule

1. Annual national convention meeting will be held to report on the completion of activities at convention and provide input into the winter meeting agenda.
2. The annual winter meeting will allow for most of the committee's work to be conducted as a whole group and in sub-groups focused on specific issues or specific types of activities (e.g., team career development events, individual awards, chapter awards).

Costs for all official members and consultants:

- convention meeting cost is borne by each participant.
- the winter meeting cost will be borne by the National FFA Organization, education division budget and the National FFA Foundation special project budgets for career development events.

National FFA Career Development Event Committee Responsibilities

The National Career Development Event Committee should:

1. broadly represent agriculture teachers, agriculture educators, subject matter specialists and industry personnel.
2. be appointed/confirmed by the chief operating officer with authority to manage the team activities and events.
3. build on the principles of volunteerism and individual members should be recognized for their contributions.
4. elect a superintendent to a five-year term that is confirmed by the FFA chief operating officer.
5. develop and propose a three-year budget to be approved by the appropriate FFA staff subject for submission to the National FFA Board of Directors.
6. develop committee assignments cooperatively with FFA staff.
7. be structured to encourage member development within the committee and be sensitive to, and represent the needs of diverse populations and cultures.
8. be large enough to adequately manage the team activities.
9. be responsible for the identification of the number of teams eligible to participate at the national level. They should encourage equal opportunity for members of teams to participate from across the states.

Conflict of Interest

Any career development event committee member who has a team qualify for or choose to train a team that qualifies for national competition in the event related to their committee assignment shall excuse themselves from their committee duties and event preparation for that convention year to eliminate the conflict of interest. It is the committee member's responsibility to inform the event superintendent and national FFA staff of

their involvement with a team that has qualified for national competition. A person designated as an assistant, group leader or official for a career development event must neither be the coach, advisor or agricultural instructor of a team/individual in that same career development event; nor shall they have had any direct part in training/coaching the team/individual in preparation for the event, after qualification for nationals has occurred.

10 CHAPTER

NATIONAL FFA

ENVIRONMENTAL AND NATURAL RESOURCES

CAREER DEVELOPMENT EVENT

A Special Project of the National FFA Foundation

IMPORTANT NOTE

Please thoroughly read the Introduction Section at the beginning of this handbook for complete rules and procedures that are relevant to all National FFA Career Development Events.

I. PURPOSE

Environmental and natural resource education has a responsibility to ensure an educated public and provide students prepared to enter careers in the environmental and natural resource industry. The purpose of the environmental and natural resource career development event is to stimulate student interest and to promote environmental and natural resource instruction in the agricultural education curriculum and to provide recognition for those who have demonstrated skills and competencies as a result of environmental and natural resource instruction.

II. EVENT RULES

1. Under no circumstance will any participant be allowed to handle any of the items in the identification portion of the practicums. Any
2. No team, team member or team coach shall visit the event facilities to observe material and facilities after September 1st. Any team, team member or coach reported and proven to do so will cause the elimination of that team from competing in the National FFA Environmental and Natural Resources Career Development Event.
3. Participants will be assigned to group leaders who will escort them to various event-staging sites. Each participant is to stay with his or her assigned group leader throughout the event or until told to change leaders by the event superintendent.
4. All participants will be given an identification number by which they will be designated throughout the event.

infraction of this rule will be sufficient to eliminate a team from the event.

5. Participants must come to the event prepared to work in adverse weather conditions. The event will be conducted regardless of the weather. Participants should have rainwear, warm clothes and appropriate footwear.
6. **Written Material:** All written material will be furnished for the event. No written materials such as tests, problems and worksheets shall be removed from the site.
7. The event will include:
 - a. Objective Written Exam
 - b. Team Activity
 - c. Identification of Material
 - d. Individual Practicums

III. EVENT FORMAT

A. Equipment

Materials student must provide- Each participant may bring an electronic calculator. Calculators used in this event should be battery operated, non-programmable, silent with large keys and large displays. Calculators should have only these functions- addition, subtraction, multiplication, division, equals, percent, square root, +/- key, and one memory register. No other calculators are allowed to be used during the event.

Equipment provided- A clipboard, two sharpened No. 2 pencils and all other tools and equipment will be furnished for the event. Participants must use the tools and equipment furnished at the event.

B. Team Activity (90 minutes in length) (1,000 points total)

1. Students will be provided a scenario that deals with an environmental/natural resource problem.

Soils

- Physical Properties

- Soil Erosion
- Soil Analysis
- Environmental Impact of Soil Degradation

Water

- Importance of Water Quality
- Factors that Influence the Quality of Water
- Measure to Ensure Water Quality
- Management Practices Used to Ensure Water Quality

Ecosystems

- Basic Ecological Concepts
- Management of Eco-Systems
- Grassland Eco-Systems
- Forestry Eco-Systems
- Aquatic Eco-Systems
- Wetland Eco-Systems
- Non-Native Species effect on Eco-Systems

Waste Management

- Preventing and Reducing Solid Waste
- Disposing of Waste
- Manure Management
- Hazardous Waste

2. Teams will be required to develop both an oral, as well as a written statement that addresses the questions in the annual scenario.
3. Teams will submit a written summary of their findings at the end of one hour. Summary is to be submitted on the disk provided to each team.
4. Teams will have ten (10) minutes of prep time prior to their oral presentation.
5. Teams will be required to give an oral presentation justifying the decisions made

by the team. The team will have eight minutes to make the oral presentation.

6. Teams will be required to answer questions in regards to the decision reached by their team. Question period will be 5 minutes in length.

Team Activity Score Card

Oral presentation.	500 points
Written presentation.	300 points
Question	200 points
TOTAL	1000 points

C. Individual Activities

1. Written Exam - Objective Test (100 points) (60 minutes)

Fifty (50) questions submitted by the committee.

2. Annual Practicums

Students will participate in the following three areas on an annual basis:

a. National/Global Issues Interview – (100 points)

Students will participate in personal interviews dealing with environmental/natural resource issues by:

1. Explaining the significance of environmental/natural resource issues.
2. Specify recommended practices for conservation of environmental/natural resources.
3. Identify basis for practices, which may appear to be controversial.
4. Analyze and evaluate national and global issues.
5. Identify and develop plans to address national and global issues.

Examples -

- *What legislation is currently being discussed that will have an affect on the environment?*
- *What role should the United States play with regulating toxic waste in other countries?*
- *Describe the Exxon Valdez oil spill and how you felt it was handled.*

b. Press Release Writing – (100 points)

1. Participants will be furnished access to computers, or similar equipment, on which to create a written document. (In the event electronic equipment is not available pencils/pens will be provided.)
2. Participants will create a written document, 350 words or less in the style of a news/press release.
3. Press release should contain the basic elements (facts) customarily found in written publications (who, what, where, when and how) The elements/facts presented are to reflect the thoughts of the participant in relation to the topic being addressed.

Examples -

- a. What type of change is being proposed?
- b. Does the proposed solution reflect an economic, or natural resource, impact on surrounding communities?
- c. Have participants clearly stated the outlined problem and a solution?
- d. Does the press release outline and explain the problem in a clear manner? (i.e.: Could someone from outside the

competition or FFA arena read the release and understand the problem and proposed solution)?

c. Identification – (100 points)

Students will identify fifty (50) items from the following combined areas:

1. Equipment
2. Plants
3. Wildlife
4. Fish
5. Reptiles/Amphibian
6. Predators
7. Birds
8. Non-Native Species

3. Rotational Practicums

Students will participate in four of the following practicums each year. Practicums may vary from year to year.

a. Water Analysis - (100 points)

1. Using measuring devices, each participant will measure a sample of water for quality analysis and contaminants.
2. Analyze the results of measurements.
3. Name possible causes of the particulate or other contaminant:
Are they natural?
Are they pollutants (what level is acceptable)?
4. Describe the effects on the environment of the pollutants.
5. List the sources of the pollutants.
6. Discuss ways the water quality can be improved.

b. Soil Nutrient Test – (100 points)

1. Students will be furnished with a sample of soil and test kit. They

will have to determine the current levels of:

- i. Nitrogen
- ii. Potassium
- iii. pH
- iv. Phosphorus

2. Students will use this information along with an extension service crop sheet provided to make suggestions for what fertilizers need to be added to grow a given crop. (Example of crops, corn, wheat, tobacco, soybeans)

c. GPS Locations – (100 points)

Participants will utilize a global position system (GPS) unit to complete one of the following:

1. Identify the longitude and latitude of a given set of points using a GPS unit and a map.
2. Identify boundaries of a given area including calculation of land area and linear feet of boundary.
3. Use GPS unit and topographic map to layout location of fence line, pond, drainage structure or other related facility.
4. Use a GPS unit to mark location of a path or road through a given area
5. Use GPS unit to determine slope of land area for installation of drainage and or other related facilities.

d. Environmental Analysis – (100 points)

Students will address the following five aspects:

1. Living Organisms - students will identify and list as many living organisms (both native and invader) as they can find within

the marked boundaries of the site. Additional species may be artificially introduced as mounted or preserved specimens.

2. Non-living components (shelter, nutrients) - students will inventory resources such as water, shelter, etc. upon which resident species depend for survival.
3. Food Web - students will define relationships among the plants and animal species that are found or introduced in the study area.
4. Ecological Succession - students will identify the stages of succession of various grasses, shrubs and trees. They will also identify causes of changes in succession patterns.
5. Situation Analysis - students will determine whether a healthy balance exists between the environment and the native species that depend upon it. They will also check remediation practices where needed.

e. Soil Profile – (100 points)

1. Students will be furnished with a scorecard; an interpretation guide and a pre-dug soil pit or core/monolith to judge. The participants will identify soil horizons, textures, percentage coarse fragments, pH, horizon colors, slope, geologic origin, soil permeability, irrigation suitability and soil structure types of the soil present in the given example.
2. Using the information from the score card and interpretation guide, the student will then identify the most appropriate use

for the given area and the erosion control practice that best fits the designated use for the land.

f. Waste Management – (100 points)

1. Participants will be presented with a scenario (ag producer, neighborhood, office building, manufacturing plant, etc.) that generates waste material creating differing environmental threats.
2. Participants will evaluate the nature of waste output to identify plausible options for reducing the rate of waste generation, recycling or providing potential alternative uses for the waste, treating the waste, or disposing of the waste.
3. Participants should be able to identify at least one benefit and one deterrent for each possible option that is offered.

IV. TIEBREAKER

Team - 1) Team with the highest team activity score, 2) Team with the highest annual practicum scores, 3) Team with the highest rotational practicum scores.

Individual - 1) Individual with the highest exam score, 2) Individual with the highest identification score, 3) Individual with the highest annual practicum score

V. AWARDS

Awards will be presented at an awards ceremony. Awards are presented to teams as well as individuals based upon their rankings. Awards are sponsored by a cooperating industry sponsor(s) as a special project, and/or by the general fund of the National FFA Foundation.

VI. REFERENCES

This list of references is not intended to be inclusive. Other sources may be utilized and teachers are encouraged to make use of the very best instructional materials available. The following list contains references that may prove helpful during event preparation.

National Council for Agricultural Education's material -

"Applied Environmental Sciences" To order contact CMS at The Ohio State University at: 614-292-4848 or fax 800-292-4919 or online at <http://cms.osu.edu/>

Wildlife Science Manual Instructional CD-ROM: The Core Catalog, National FFA Organization product number CAERT-WSM. 888-332-2668 fax orders to 800-366-6556 or on line at <http://www.ffaunlimited.org/caop.html>

Environmental Science and Technology. Porter, Lee, Turner and Hillan. Interstate Publishers, Inc. 1997. PO Box 50 Danville, IL 61834-0050

Managing Our Natural Resources. Camp and Daughtery. Delmar Publishers, Inc. 1988. Albany NY.

- *Wildlife Management*, Stutzenbaker, Scheil, Swan, Lee and Mattics, Interstate Publishers, Inc. 1999.
- *Natural Resources and Environmental Technology*, Lee, Interstate Publishers, Inc. 2000.
- *Environmental Science for Agriculture and the Life Sciences*. Albany, NY. Delmar Publishers 1994.
- *Our Natural Resources and Their Conservation*. Kircher, H.B., Wallace, D.L., & Gore, D.J. Danville, IL. Interstate Publishers, Inc. 1992.
- *Soil Science: Evaluation, Interpretation, and Management of Soil*. Columbia, MO. Instructional Materials Laboratory, University of Missouri, phone: 800-669-2465.

- *The Global Ecology Handbook. What You Can Do About the Environmental Crisis*. Courson, W.H. (Ed.). Boston, MA. Beacon Press 1990.
- *Biological Science, an Ecological Approach*. Dubuque, IA. Kendall Hunt Publishers, 1992
- *Introduction to Forestry Science*. L.DeVere Burton. Delmar Publishers, 2000.
- *Agriscience & Technology*. L. DeVere Burton. Delmar Publishers, 1992.

Non-Native (Invader) Resource List

- U.S. Fish and Wildlife Service
- U.S. Park Service
- U.S. Dept. of Interior
- U.S. Forest Service
- State Department of Natural Resources
- Gulf of Mexico Program
- Minnesota Sea Grant
2305 East 5th St.
Duluth, MN 55812-1445
Phone:
218-726-6191
www.ansc.purdue.edu/sgnis
Sea Grant has developed a CD-ROM titled "Your Exotic Species One-Stop Information Shop!" Price \$14.00
- Internet Locations
Search Engines: Type in "exotic species", "non-native species", "non-indigenous species". Make sure to include quotations in search.
www.nbii.gov/invasive
www.glifwc.org
www.flmnh.ufl/fnps/exotics
www.gmpo.gov

Environmental and Natural Resources Event

IDENTIFICATION LIST

Equipment	Forestry	229. skunk
Water Quality	124. biltmore stick	230. weasel
101. refractometer	125. diameter tape	231. whitetail deer
102. secchi disk	126. prism	232. woodchuck
103. thermometer	127. tree increment borer	Birds
104. water bottle samplers	Native Species	301 bald eagle
105. water meter for physical/chemical parameters (pH, conductivity, and/or DO	Wildlife	302 blue jay
Aquatic	201. armadillo	303 brown pelican
107. aquatic net	202. badger	304 brown thrasher
108. bottom dredges	203. beaver	305 calliope hummingbird
109. fish measuring board	204. bison	306 Canada goose
110. plankton net	205. black bear	307 cardinal
111. seines	206. bobcat	308 Cooper's hawk
112. sieves	207. chipmunk	309 Crissal's thrasher
113. stream bottom sampler	208. cottontail	310 eastern bluebird
Wildlife	209. coyote	311 great horned owl
114. binoculars	210. elk	312 great blue heron
115. mammal traps	211. fox squirrel	313 golden eagle
116. snake/reptile stick	212. gray squirrel	314 kestrel
117. radio telemetry unit	213. gray wolf	315 least tern
118. animal tags/bands	214. grizzly bear	316 mallard duck
Geographical	215. jack rabbit	317 mountain bluebird
119. GPS unit	216. mole	318 osprey
Weather	217. moose	319 purple martin
120. barometer	218. mountain goat	320 quail
121. sling psychrometer	219. mountain lion	321 red-tailed hawk
122. rain gauge	220. muskrat	322 ruby-throated hummingbird
123. wind speed meter	221. opossum	323 turkey
	222. pocket gopher	324 white pelican
	223. polar bear	325 wood duck
	224. porcupine	Reptiles/Amphibians
	225. prairie dog	401. alligator
	226. pronghorn	402. alligator snapping turtle
	227. raccoon	403. black rat snake
	228. red fox	

- 404. bullfrog
- 405. collared lizard
- 406. common snapping turtle
- 407. copperhead snake
- 408. coral snake
- 409. corn snake
- 410. cottonmouth
- 411. crocodile
- 412. diamondback rattlesnake
- 413. fence lizard
- 414. garter snake
- 415. green anole lizard
- 416. gray tree frog
- 417. red eared slider
- 418. ring neck snake
- 419. rubber boa snake
- 420. scarlet king snake
- 421. timber rattlesnake
- 422. Woodhouse's toad

Fish and Other Aquatic Animals

- 501. blue catfish
- 502. bream/bluegill

- 503. channel catfish
- 504. clam
- 505. crab
- 506. crappie
- 507. crayfish
- 508. flathead catfish
- 509. largemouth bass
- 510. lobster
- 511. salmon
- 512. shrimp
- 513. smallmouth bass
- 514. sturgeon
- 515. trout
- 516. walleye
- 517. yellow bullhead catfish

Invasive/Non-Native Species

Plants

- 601. Chinese tallow
- 602. English ivy
- 603. Himalaya blackberry
- 604. hydrilla
- 605. kudzu
- 606. leafy spurge

- 607. melaleuca
- 608. mimosa tree
- 609. purple loosestrife
- 610. saltcedar

Animals

- 701. Asiatic clam
- 702. Asian long-horned beetle
- 703. brown trout
- 704. carp
- 705. Chinese mitten crab
- 706. chukkar
- 707. English sparrow
- 708. European starling
- 709. feral hog
- 710. fire ant
- 711. Norway rat
- 712. nutria
- 713. ring neck pheasant
- 714. sea lamprey
- 715. talipia
- 716. zebra mussel

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

ENVIRONMENTAL ANALYSIS SCORECARD

Your assignment is to analyze the given ecosystem with the following four aspects in mind:

QUESTION	POSSIBLE POINTS	SCORE
Identify and list as many organisms (both native and invader) that can be found within the marked boundaries of this site.	20	
Identify and list all non-living components found with the marked site.	20	
Describe the food web presented in this marked ecosystem.	20	
Identify the stages of succession of various grasses, shrubs and trees.	20	
Determine whether a healthy balance exists and recommend remediation where needed.	20	
Total Score:	100	

Judge's Name

Judge's Signature

Date

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

GPS LOCATION SCORECARD

List your numbers for each location point following the latitude and longitude given. Note: Variance for differential corrections are noted on condition sheet.				
LOCATION POINT	POINT NUMBER		POSSIBLE POINT	SCORE
1			20	
2			20	
3			20	
4			20	
5			20	
			Total Points: 100	

Judge's Name

Judge's Signature

Date

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

NATIONAL GLOBAL ISSUES INTERVIEW SCORECARD

	POSSIBLE POINTS	SCORE
Appearance and courtesy	5	
Speech <ul style="list-style-type: none"> • Vocabulary • Volume • Enunciation 	10	
Attitude and personality <ul style="list-style-type: none"> • Forcefulness • Poise • Temperament • Sincere 	15	
Ability to convince interviewer <ul style="list-style-type: none"> • Persuasiveness • Self confidence 	5	
Knowledge <ul style="list-style-type: none"> • Educational experience • Occupational experience • Facts 	20	
Reliability <ul style="list-style-type: none"> • Frankness • Consistency • Accuracy 	15	
Professionalism	5	
Response to questions	25	
Total:	100	

Judge's Name

Judge's Signature

Date

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

PRESS RELEASE WRITING SCORECARD

CATEGORY	POSSIBLE POINTS	SCORE
Format <ul style="list-style-type: none"> • Name/State • Header/Headline • Contact information • Summary/Conclusion • 350 words or less • Final press release marks at end 	15	
Lead/Focus	20	
Organization <ul style="list-style-type: none"> • Concise/Clarity • Paragraph structure • Sentence structure • Word choice • Logical progression 	25	
Accuracy <ul style="list-style-type: none"> • Of information • Of quotes 	15	
Creativity	10	
Grammar <ul style="list-style-type: none"> • Spelling • Punctuation • Legibility 	15	
Total:	100	

Judge's Name

Judge's Signature

Date

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

SOIL NUTRIENT TEST SCORECARD

Your job today is to take a soil sample from the given area. You will need to run an analysis to determine the levels of nitrogen, phosphorus, potassium and pH. Using these results you will also need to use the given Extension Service crop sheet and make a recommendation for the amount and type of fertilizer that should be added to grow the designated crop.

Category	Level	Possible Points	Score
Nitrogen		25	
Potassium		25	
pH		20	
Fertilizer Recommendations:		30	
	Total Score:	100	

Judge's Name *Judge's Signature* *Date*

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

TEAM ACTIVITY SCORECARD

	CATEGORY	POSSIBLE	SCORE
1	Quality of Management Plan (Written Presentation 300 points) Previously scored by judges using Written Proposal Scorecard		
2	Analysis of Information (Oral Presentation 200 points)		
	• Introduction	20	
	• Clearly identify the problem(s)	20	
	• Short term goals discussed	20	
	• Long term goals discussed	20	
	• Short term and long term goals are measurable	20	
	• Demonstrates knowledge and experience in subject area	20	
	• Possible solutions analyzed	20	
	• Recommendations discussed	20	
	• Clearly addresses the scenario	20	
	• Summary/Conclusion	20	
3	Team Presentation (300 Points)		
	• Participation of all team members	60	
	• Logical progression of material	60	
	• Delivery professional, organized and well thought out	60	
	• Presentation clear and effective	60	
	• Team attitude	60	
4	Questions (200 Points)		
	• Each member of the team responds to at least one question	50	
	• Confidence shown	50	
	• Effectiveness of response	100	
	TOTAL	1000	

Judge's Name

Judge's Signature

Date

Environmental and Natural Resources

Name: _____ Chapter: _____

State: _____ Team No.: _____

Member No.: _____

WATER ANALYSIS SCORECARD

Your job today is to analyze the given water sample. You will need to find the given levels of dissolved oxygen, nitrates, pH and the current temperature. Using this information you will need to describe the effects on the environment, limiting factors and discuss ways that water quality can be improved.

CATEGORY	ANSWERS	POSSIBLE POINTS	SCORE
PH		10	
Dissolved Oxygen		10	
Nitrates		10	
Temperature		10	
Effects on the Environment:		20	
Limiting Factors:	xxxxxxxxxxxxxxxxxxxxxxxx	20	
How can Water Quality be improved?		20	
Total Score:		100	

Judge's Name *Judge's Signature* *Date*

Environmental and Natural Resources

Participant Name: _____ Participant No.: _____

State: _____

SOIL PROFILE SCORECARD

PART 1

SOIL FACTORS – PART 1		INTERPRETATION OF SOIL FACTORS	
<i>Check Appropriate Box</i>		<i>Check Appropriate Box</i>	
SCORE		SCORE	
	A. Texture (5 points possible) <i>Sur. Sub.</i> <input type="checkbox"/> <input type="checkbox"/> 1. Coarse <input type="checkbox"/> <input type="checkbox"/> 2. Moderately Coarse <input type="checkbox"/> <input type="checkbox"/> 3. Medium <input type="checkbox"/> <input type="checkbox"/> 4. Moderately Fine <input type="checkbox"/> <input type="checkbox"/> 5. Fine B. Depth of Soil (5 points possible) <input type="checkbox"/> 1. Deep <input type="checkbox"/> 2. Moderately Deep <input type="checkbox"/> 3. Shallow <input type="checkbox"/> 4. Very Shallow C. Slope (5 points possible) <input type="checkbox"/> 1. Nearly Level 0–1% <input type="checkbox"/> 2. Gently Sloping 1–3% <input type="checkbox"/> 3. Moderate Sloping 3–5% <input type="checkbox"/> 4. Strongly Sloping 5–8% <input type="checkbox"/> 5. Steep 8–15% <input type="checkbox"/> 6. Very Steep > 15% D. Erosion – Wind and Water (5 points possible) <input type="checkbox"/> 1. None to Slight <input type="checkbox"/> 2. Moderate <input type="checkbox"/> 3. Severe <input type="checkbox"/> 4. Very Severe		E. Permeability (5 points possible) <input type="checkbox"/> 1. Rapid <input type="checkbox"/> 2. Moderate <input type="checkbox"/> 3. Slow <input type="checkbox"/> 4. Very Slow F. Surface Runoff (5 points possible) <input type="checkbox"/> 1. Rapid <input type="checkbox"/> 2. Moderate <input type="checkbox"/> 3. Slow <input type="checkbox"/> 4. Very Slow G. Major Factors That Keep Area Out of Class 1 (15 points possible) <input type="checkbox"/> 1. Texture <input type="checkbox"/> 6. Runoff <input type="checkbox"/> 2. Depth <input type="checkbox"/> 7. Wetness <input type="checkbox"/> 3. Slope <input type="checkbox"/> 8. Flooding <input type="checkbox"/> 4. Erosion <input type="checkbox"/> 9. None <input type="checkbox"/> 5. Permeability
	Total Score Column		Total Score Column
			Total Score PART 1 (60 points possible)

PART 2 (Over)

Environmental and Natural Resources

Participant Name: _____ Participant No.: _____

State: _____

SOIL PROFILE SCORECARD

RECOMMENDED TREATMENTS – PART 2	CHECK APPROPRIATE BOX
SCORE	
<p>A. Texture (15 points possible)</p> <ul style="list-style-type: none"> <input type="checkbox"/> 1. Row crop/occasional soil conserving crop <input type="checkbox"/> 2. Row crop/frequent soil conserving crop <input type="checkbox"/> 3. Row crops not more than 2 out of 4 years <input type="checkbox"/> 4. Row crops not more than 1 out of 5 years <input type="checkbox"/> 5. Return crop residue to the soil <input type="checkbox"/> 6. Practice conservation tillage <input type="checkbox"/> 7. Establish recommended grass or grasses & legumes <input type="checkbox"/> 8. Proper pasture and range management <input type="checkbox"/> 9. Protect from burning <input type="checkbox"/> 10. Control grazing <input type="checkbox"/> 11. Plant recommended trees <input type="checkbox"/> 12. Harvest trees selectively <input type="checkbox"/> 13. Use only for wildlife or recreation area <p>B. Slope (10 points possible)</p> <ul style="list-style-type: none"> <input type="checkbox"/> 14. Control brush or trees <input type="checkbox"/> 15. Terrace and farm on contour <input type="checkbox"/> 16. Maintain terraces <input type="checkbox"/> 17. Construction diversion terraces <input type="checkbox"/> 18. Install drainage system <input type="checkbox"/> 19. Control gullies <input type="checkbox"/> 20. No mechanical treatment needed <p>C. Fertilizer and Soil Amendments (15 points possible)</p> <ul style="list-style-type: none"> <input type="checkbox"/> 21. Soil amendments <input type="checkbox"/> 22. Phosphorous [P] <input type="checkbox"/> 23. Potassium [K] <input type="checkbox"/> 24. Nitrogen [N] <input type="checkbox"/> 25. Fertilizer or soil amendments not needed 	
Total Score PART 2 (40 points possible)	
Total Score PART 1 (60 points possible)	
GRAND Total Score (100 points possible)	

Judge's Name

Judge's Signature

Date