Fruit Tree Pruning

Revised 6/2010

Purpose and Standards

The Fruit Tree Pruning event seeks to effectively prepare the students to learn current agriculture pomology practices and procedures used in today’s industry. Workers seeking careers in agriculture must not only develop a high degree of knowledge and skill, they must also develop the ability to solve difficult problems. This event blends the testing of manipulative skills and knowledge required for careers in agriculture production.

Foundation standards: Mathematics Algebra, 15.0 and Geometry 8.0 & 11.0. History & Social Science Principles of Economics: 12.2.2, 12.2.5, 12.2.6, 12.2.7. Communication: 1.1, 2.2, & 1.8. Plant and Soil Pathway: G11.1, 5.0 5.3 and 11.1. Ag and Natural Resources Pathway: Health & Safety 6.0, 6.1, 6.2, 6.4, & 6.5.

Contestants

The team shall consist of three members who have received enough training so they can properly prune peaches and plum trees, with all three individual scores counting as the team score. All team members are eligible for individual awards.

Classes

|  |  |  |
| --- | --- | --- |
| **Class** | **Individual Points** | **Team Points** |
| Written Quiz | 100 | 300 |
| Pruning Class | 50 | 150 |
| Pruning Reasons | 50 | 150 |
| Pruning Mature Plums | 100 | 300 |
| Pruning Mature Peaches | 100 | 300 |
| Pruning Mature Peaches (Canning) | 100 | 300 |
| TOTAL | 500 | 1500 |

Tie Breaker

1. The team or individual scoring the highest reason score(s) will be the winner.
2. If a tie still exists, the total score of the individual or team will be used to determine the high individual or team.

Sub-contest Awards

Sub-contest awards will be given for high teams and individuals in the following areas: Written Quiz, Pruning class (judging and reasons), Pruning Mature Plums, Pruning Mature Peaches, and Pruning Mature Peaches (Canning).

Rules

1. The contest shall consist of the following areas:
   1. Part 1. A written quiz on "Pruning Deciduous Fruit Trees" by Tufts and Harris; U.C. Circ. -444, 1955.
      1. Value 100 points.
      2. Time: Thirty (30) minutes
   2. Part 2. The contestant shall prune a scaffold in the presence of the judge – not to exceed 5 minutes. The contestant will be subjected to oral questions and may provide oral explanations while pruning.

1. Value of 100 points total with 50 points being from quality of pruning and 50 points for reasoning/questions.

* 1. Part 3. Pruning a mature plum tree (no reasons will be given). Pruning methods will be compared to those used for standard Santa Rosa type plums for quality fruit.
     1. Any student who is, in the judgment of the judge, pruning improperly, will be asked to stop pruning.
     2. The contestant should be allowed to complete as much of the tree as possible, while keeping the point values of speed and quality of work in proper relationship as stated on the scorecard.
     3. Value of pruning plum trees - 100 points. (Scorecard is enclosed).
     4. Time: Twenty (20) minutes is allowed for pruning plums.
  2. Part 4. Pruning a mature peach tree. (No reasons will be given.) Pruning methods will be compared to those used for standard type peaches for quality fruit. Each student will be issued at least one tree when possible.
     1. The host school will issue a listing of the thinning requirements of the peach tree as to:
        1. heavy thinning
        2. medium thinning
        3. light thinning
     2. Value - 100 points are allowed for this class.
     3. Twenty (20) minutes are allowed for pruning peaches.
     4. Same scorecard as used for plums.
  3. Part 5. Pruning a mature peach tree (no reasons will be given). Pruning methods will be compared to those used for standard canning type peaches for quality fruit. Any student who is, in the judgment of the judge, pruning improperly, will be asked to stop pruning.

1. The contestant should be allowed to complete as much of the tree as possible, while keeping the pint values of speed and quality of work in proper relationship as stated on the scorecard.
2. Value of pruning the canning peach tree – 100 points.
3. Time: 20 minutes is allowed for pruning canning peaches.

SCORECARD

NON-BEARING (1 & 2 years old \*\*Training System (Open or Vase)

|  |  |  |
| --- | --- | --- |
|  | **Points** | **Score** |
| Points |  |  |
| **A. Framework (60 points)** |  |  |
| 1. Height of head | 13 |  |
| 2. Number of primaries | 13 |  |
| 3. Distribution | 13 |  |
| 4. Number of secondaries | 7 |  |
| 5. Distribution of secondaries | 7 |  |
| 6. General symmetry | 7 |  |
| **B. Pruning (30 Points)** |  |  |
| 1. Method of pruning: |  |  |
| procedure systematic | 3 |  |
| 2. Kind of wood left | 4 |  |
| 3. Thoroughness | 6 |  |
| 4. More brush left on windward side | 3 |  |
| 5. Severity of pruning in proportion to growth | 7 |  |
| 6. Proper cuts | 3 |  |
| 7. Speed | 4 |  |
| **C. Handling and Use of Equipment** |  |  |
| 1. Shears & Saws | 4 |  |
| **D. Condition of Equipment** | 4 |  |
| **E. Proper dress** | 2 |  |
| **Total Points Possible** | 100 |  |
|  | Total Points |  |

Pruning Deciduous Fruit Trees

MATURE TREES

|  |  |  |
| --- | --- | --- |
|  | **Points** | **Score** |
| **A. FRAMEWORK (20 pts.)** |  |  |
| 1. Number of Tertiary Scaffolds | 5 |  |
| 2. Spacing of Tertiary Scaffolds | 5 |  |
| 3. General Symmetry of tree | 5 |  |
| 4. Top cut made to proper lateral | 5 |  |
| **B. KIND OF PRUNING (50 pts.)** |  |  |
| 1. Kind of pruning based upon length of growth age of tree and use of fruit - severe moderate light | 25 |  |
| 2. Amount and kind of fruit wood left | 10 |  |
| 3. Amount of spacing of fruit wood | 15 |  |
| **C. THOROUGHNESS OF PRUNING (20 pts.)** |  |  |
| 1. Cuts made properly | 15 |  |
| 2. All objectionable growth removed | 5 |  |
| **D. CONDITION AND USE OF EQUIPMENT (10 pts.)** |  |  |
| 1. Condition of pruning Shears | 5 |  |
| 2. Ability to handle ladder properly | 5 |  |
| SUB TOTAL | 100 |  |
| **E. SPEED OF WORK (Deduct)** |  |  |
| 1. Deduct 1-10 points if not finished with pruning |  |  |
| TOTAL | 100 |  |

**Part 2. Scaffold Pruning –**

|  |  |  |
| --- | --- | --- |
|  | **Points** | **Score** |
| **A. KIND OF PRUNING**  (**30 pts.)** |  |  |
| 1. Kind of pruning based upon length of growth age of tree  and use of fruit – severe moderate light | 15 |  |
| 2. Amount and kind of fruit wood left | 10 |  |
| 3. Amount of spacing of fruit wood | 5 |  |
|  |  |  |
| **B. THOROUGHNESS OF PRUNING**  **(15 pts.)** |  |  |
| 1. Cuts made properly | 10 |  |
| 2. All objectionable growth removed | 5 |  |
|  |  |  |
| **C. CONDITION AND USE OF EQUIPMENT** **(5 pts.)** |  |  |
| 1. Condition of pruning shears | 2 |  |
| 2. Ability to handle ladder properly | 3 |  |
|  |  |  |
| **SUB TOTAL** | **50** |  |
| **D. SPEED OF WORK (Deduct)** |  |  |
| 1. Deduct 1-10 points if not finished with pruning | 1-10 |  |
| **TOTAL** | **50** |  |