

Physical Events

ARCHERY

1. Each member club may enter one contestant.
2. Competition will be on an individually-scored basis.
3. National Archery Association of the United States rules are to be used.
4. Contestants will shoot 1/5 of the Junior American Round--6 arrows at 40 yards, 6 arrows at 30 yards, and 6 arrows at 20 yards, respectively.
5. Targets shall be of standard size (48 inches) in diameter, divided into a central disc 9-3/5 inches in diameter. Five concentric rings each 4-4/5 inches in width colored from center out, respectively, gold, red, blue, black and white.
6. Targets shall be placed so that the center of the gold is 51 inches from the ground.
7. Only conventional hunting bows with a minimum weight of 30 pounds at 28 inches may be used.
8. Use of external stabilizers, sights, pulleys, or releases will not be allowed. All bows shall be thoroughly inspected and approved by the judge prior to shooting.
9. Only arrows with field type points may be used. No broadhead points may be used.
10. No cross bows will be allowed.
11. The face of the target has 5 concentric rings each bearing a scoring value: gold center, 9 points for each hit; red scores 7; blue scores 5; black scores 3; and white scores 1 point.
12. An arrow cutting through two colors is given the higher value (unless arrow is touched before the decision is made by scorekeeper, in which case the lower value is taken).
13. Any arrow rebounding from target face shall be re-shot.
14. Arrows must not be touched or withdrawn from target face until official scoring is completed.
15. One half of the contestants shoot at one time on two or more targets.
16. Six practice shots at any distance, which will be left to the discretion of the competitor, will be allowed prior to the competition.
17. Arrows may be handed to the contestant.

AXE THROW

1. Each member club may enter one contestant.
2. Each contestant must provide his/her own axe.
3. The axe handle must be at least eighteen (18") inches long, measured from where the handle enters the head. The axe may have either a single or double bit head.
4. The target shall be the end of a log or its equivalent, at least twenty (20") inches in diameter, and have a bullseye three (3") inches in diameter inscribed upon it. Two additional rings of nine (9") and eighteen (18") inches in diameter respectively shall also be inscribed upon the target. The center of the target shall be from three and one-half (3-1/2') to four (4') feet above the ground and the face shall be plumb. Point value shall be: three (3) points for the inner ring, two (2) points for the middle ring, and one (1) point for the third ring. Hits on the line shall count the higher point value. **Double sticks will be awarded zero points, and points will only be awarded for sticks of the leading edge of the blade (Approved by vote at ASFC executive meeting March 17, 2007).**
5. Contestants will be allowed three practice throws prior to the five count throws.
6. Each throw will be made from between two lines on the ground which shall be five (5) and ten (10) yards from the target, respectively. No point count will be given for any throw in which the contestant steps over the line before the axe strikes the target. Amended March 21, 1996.
7. Highest cumulative point score wins.
8. The target will be placed so that the sun is at the contestant's back if possible.

BOWSAW - MEN'S

1. Each member club may enter one contestant.
2. Each contestant will use his/her own saw. The **host school shall make available to all clubs a backup saw**, to be used at the discretion of the contestants, with the clock continuing to run. Replacement of the contestant's own saw with the backup saw may be made only in the event of a deformity or dysfunction of the original bow saw. An inspection of the original saw by the judges will follow the completion of the cut to determine saw deformity. If the judges rule that the original saw was not deformed the contestant will be automatically disqualified and no points will be awarded. A consensus was reached on what constitutes a deformity: "any breakage of teeth or warp of saw blade". **Approved at the ASFC business meeting; March 25, 1993.**
3. The use of lubricants will be left to the discretion of the contestant. Only the constant may lubricate his saw.
4. Cutting material shall consist of a square cant uniformly eight by eight (8" x 8") inches of a soft hardwood species. The species will be specified to each school by January 1. The cant will be firmly secured into a cradle so that it is two and one-half (2.5') feet from the ground. The angle of the set to the cant must also be specified prior to the Conclave.
5. The contestant who saws completely through the cant in the least time shall be the winner.
6. Practice cuts will be allowed on contest cants but cannot overlap actual cut on competition.
7. All cants should be kept green by soaking with water as soon as possible (preferably two or three days after cutting).
8. Time shall start when the teeth of the saw touch the cant.
9. Time shall end when cut portion hits the ground.
10. **Contestants must wear safety chaps during the competition (Added by SFASU, 3-10-05, as result of approval of revised constitution with its risk management plan).**

BOWSAW - WOMEN'S

1. Each member club may enter one contestant.
2. Each contestant will use his/her own saw. The **host school shall make available to all clubs a backup saw**, to be used at the discretion of the contestants, with the clock continuing to run. Replacement of the contestant's own saw with the backup saw may be made only in the event of a deformity or dysfunction of the original bow saw. An inspection of the original saw by the judges will follow the completion of the cut to determine saw deformity. If the judges rule that the original saw was not deformed the contestant will be automatically disqualified and no points will be awarded. A consensus was reached on what constitutes a deformity: "any breakage of teeth or warp of saw blade". **Approved at the ASFC business meeting; March 25, 1993.**
3. The use of lubricants will be left to the discretion of the contestant. Only the constant may lubricate her saw.
4. Cutting material shall consist of a square cant uniformly eight by eight (8" x 8") inches of a soft hardwood species. The species will be specified to each school by January 1. The cant will be firmly secured into a cradle so that it is two and one-half (2.5') feet from the ground. The angle of the set to the cant must also be specified prior to the Conclave.
5. The contestant who saws completely through the cant in the least time shall be the winner.
6. Practice cuts will be allowed on contest cants but cannot overlap actual cut on competition.
7. All cants should be kept green by soaking with water as soon as possible (preferably two or three days after cutting).
8. Time shall start when the teeth of the saw touch the cant.
9. Time shall end when cut portion hits the ground.
10. **Contestants must wear safety chaps during the competition (Added by SFASU, 3-10-05, as result of approval of revised constitution with its risk management plan).**

BIRLING

1. Each member club may enter one contestant.
2. Contestants must wear long trousers and a shirt. Footgear may be worn; however, no cleats are allowed on foot gear.
3. The log will be twelve (12') to fourteen (14') feet long and of sufficient diameter to float two people.
4. Contestants will be paired by a drawing conducted by the judges, and the contest will be run by double elimination.
5. Contestants will be assisted in mounting the floating log and will begin birling when both are balanced. Balancing objects may not be used. No bodily contact between contestants is permitted. An eighteen (18") inch line will be placed at the center of buoyancy on the log. Contestants will not be allowed to touch this line. A clear signal should be given by each competitor to show holders that they are ready.
6. The contestant who remains on the log or is the last person in the water wins the throw **(slight rewording to “in the water” of rule approved ASFC Executive Meeting March 9, 1995)**.
7. The contestant who wins two out of three throws wins the paired trial. If the judges are unable to determine the winner of an individual throw, the throw will be repeated.
8. The contestant is not allowed to touch the log with any part of his/her body other than the feet at any time after competition has started.
9. The birling log should be a clear log, free of knots, and should be debarked by host club soon after cut.
10. The log must be tested by the host club to insure that it is floatable and will support at least two standing 200 lb. people.
11. The log should be covered with burlap by the host club, covering the entire log.

CHAIN THROW

1. Each member club may enter one pair of contestants who will work together.
2. Each team will be responsible for providing their own chain.
3. **The chain shall be a 100 foot chain, without trailer, with a leather thong at least four (4'') inches long attached to each end (100' chain approved by vote at ASFC executive meeting March 17, 2007).**
4. The chain must be laid out between two fifty (50') foot lines, one hundred and fifty (150') feet apart. Any part of the chain or contestants crossing any line of this rectangle will result in disqualification.
5. The chaining course will consist of two chaining pins set at a distance of **ninety-nine (99') feet apart**. The starting point will be a chaining pin placed five (5') feet from the center of an end line.
6. The head judge will examine the tied chain at the start and finish of each try to be sure that the chain is thrown and tied correctly. The judge will drop the tied chain from waist height on the spot designated by the contestants. Time begins whenever either contestant first touches the chain on the ground.
7. A stake, one and one half by one and one half (1-1/2" x 1-1/2") inches and three (3') feet above the ground, shall be located three feet inside the end line furthest from the starting point.
8. The chain must be completely laid out by the head chainman, and either or both chainmen must remove all kinks from the chain.
9. Simultaneously with the rear chainman touching the starting pin, the head chainman must stretch the chain and clearly touch the chaining pin one hundred and thirty-one feet away.
10. The chain is then taken up by the head chainman (with assistance from rear chainman, if desired), thrown, tied, and dropped from the height of three (3') feet over the stake. Time ends when the chain hits the ground.
11. To be correctly tied, both thongs must be wrapped at least twice and secured in any fashion so it will remain secure after the chain is dropped over the finishing stake. Failure to achieve this will result in disqualification.
12. One (1) deviation (i.e., one twisted loop or a loop more than one (1) link but less than two (2) links out of place) shall be grounds for a twenty (20) second penalty. More than one (1) deviation in any chain (i.e., both of above or two (2) loops twisted, or loops more than two (2) links out of place) shall be grounds for disqualification of the time.

CROSSCUT SAWING - JACK & JILL

1. Each member club may enter one pair of contestants, one male and one female, who will work together.
2. Each team must provide their own two-person cross-cut saw.
3. The use of lubricants will be left to the discretion of the contestants. The lubrication may not be applied over the cant or once the cut has been started.
1. Cutting material shall consist of a squared cant uniformly ten by ten (10" x 10") inches of a soft hardwood species. The species shall be specified to each school by January 1. The cant will be firmly secured into a cradle twenty (20") inches from the bottom of the cant to the ground.
2. The team which saws completely through the cant in the least time shall be declared the winner. Time shall start when the saw first moves, after it has been held motionless on or above the wood, and after the competitors have signaled they are ready to the judges. (*For safety reasons, the chip start was eliminated by a majority vote of advisors December 12, 2006*). Time shall end when the cut portion strikes the ground.
6. In the event of damage to the saw, the time is continued while changes or repairs are made to the saw.
7. Practice cants should be of the same species and condition as the contest cants.
8. All cants should be kept green by soaking with water as soon as possible (preferably two or three days after cutting).
9. One practice start or cut shall be allowed on the competition cant immediately before competition.
10. **Contestants must wear safety chaps during the competition (Added by SFASU, 3-10-05, as result of approval of revised constitution with its risk management plan).**

CROSSCUT SAWING - MEN'S

1. Each member club may enter one pair of contestants, two males, who will work together.
2. Each team must provide their own two-person cross-cut saw.
3. The use of lubricants will be left to the discretion of the contestants. The lubrication may not be applied over the cant or once the cut has been started.
4. Cutting material shall consist of a squared cant uniformly ten by ten (10" x 10") inches of a soft hardwood species. The species shall be specified to each school by January 1. The cant will be firmly secured into a cradle twenty (20") inches from the bottom of the cant to the ground.
5. The team which saws completely through the cant in the least time shall be declared the winner. Time shall start when the saw first moves, after it has been held motionless on or above the wood, and after the competitors have signaled they are ready to the judges. (*For safety reasons, the chip start was eliminated by a majority vote of advisors December 12, 2006*). Time shall end when the cut portion strikes the ground.
6. In the event of damage to the saw, the time is continued while changes or repairs are made to the saw.
7. Practice cants should be of the same species and condition as the contest cants.
8. All cants should be kept green by soaking with water as soon as possible (preferably two or three days after cutting).
9. One practice start or cut shall be allowed on the competition cant immediately before competition.
10. **Contestants must wear safety chaps during the competition (Added by SFASU, 3-10-05, as result of approval of revised constitution with its risk management plan).**

CROSSCUT SAWING - WOMEN'S

1. Each member club may enter one pair of contestants, two females, who will work together.
2. Teams with only one eligible female competitor can avoid scoring zero points by adding an ineligible female from their school, or another competing school. A 2-female team of this makeup will receive last place points, regardless of the time. This rule was adopted by a vote at the ASFC executive meeting March 17, 2007.
3. Each team must provide their own two-person cross-cut saw.
4. The use of lubricants will be left to the discretion of the contestants. The lubrication may not be applied over the cant or once the cut has been started.
5. Cutting material shall consist of a squared cant uniformly eight by eight (8" x 8") inches of a soft hardwood species. The species shall be specified to each school by January 1. The cant will be firmly secured into a cradle twenty (20") inches from the bottom of the cant to the ground.
6. The team which saws completely through the cant in the least time shall be declared the winner. Time shall start when the saw first moves, after it has been held motionless on or above the wood, and after the competitors have signaled they are ready to the judges. *(For safety reasons, the chip start was eliminated by a majority vote of advisors December 12, 2006).* Time shall end when the cut portion strikes the ground.
7. In the event of damage to the saw, the time is continued while changes or repairs are made to the saw.
8. Practice cants should be of the same species and condition as the contest cants.
9. All cants should be kept green by soaking with water as soon as possible (preferably two or three days after cutting).
10. One practice start or cut shall be allowed on the competition cant immediately before competition.
11. **Contestants must wear safety chaps during the competition (Added by SFASU, 3-10-05, as result of approval of revised constitution with its risk management plan).**

KNIFE THROW

1. Each member club may enter one contestant.
2. Each contestant will use his own knife.
3. All knives must be of the woodsman or hunting type (a single edge knife with a finger guard) and non-folding blade. It must not be home-made or manufactured especially for throwing. The finger guard must not be bent backwards or removed from the cutting-edge side of the blade.
4. The target shall be the same as required for Axe Throwing:

The target shall be the end of a log or its equivalent, at least twenty (20") inches in diameter, and have a bullseye three (3") inches in diameter inscribed upon it. Two additional rings of nine (9") and eighteen (18") inches in diameter respectively shall also be inscribed upon the target. The center of the target shall be from three and one-half (3-1/2') to four (4') feet above the ground and the face shall be plumb.

5. Contestants will be allowed three practice throws prior to the five count throws.
6. Each throw will be made from between two lines which shall be five (5) and ten (10) yards from the target respectively. No point count will be given for any throw in which the contestant steps over the line before the knife strikes the target. **Amended March 21, 1996.**
7. Points shall be awarded shall be the same as for Axe Throwing:

Point value shall be: three (3) points for the inner ring, two (2) points for the middle ring, and one (1) point for the third ring. Hits on the line shall count the higher point value.

8. Highest accumulated point score wins.
9. In case of a tie for first, second or third places, additional sets of five throws will be allowed until the tie is broken. The losing contestant in the tie-breaker will automatically gain the next lower position.
10. The target will be placed so that the sun is at the contestant's back if possible.

LOG CHOPPING

1. Each member club may enter one contestant.
2. Cutting material should be a ten (10") inch square cant of a soft hardwood species. The cant will be secured at least four (4") inches from the ground. The species to be used will be left to the discretion of the host club.
3. Each contestant must furnish his own axe. The axe used may be either single or double bitted with up to a 7.5-pound head and any length handle.
4. Timing will start on a signal from the judges and will stop when contestant signals the completion of the cut by placing the axe on the ground and throwing his arms up. Unless the cant is completely severed at this time, the contestant will be disqualified. A practice cut or cuts will be allowed on the competition cant as long as the cuts do not extend into the competition cut.
5. In case the axe breaks during the running of the contest, time will not stop while the axe is replaced.
6. Fastest time for the complete cut determines the winner.
7. The host club will inform the other clubs by January 1 as to the species to be used. In turn, the member clubs will notify the host club of their acceptance of the designated species.
8. There will be as many extra cants as possible.
9. A five (5) second penalty will be assessed for each chop made ahead of the starting time.
10. All contestants shall be required to wear safety-type shoes or foot and shin guards.
11. Each contestant will have a separate cant which is approximately sixty (60") inches long. The cut may be made at any point as long as the entire cut does not extend into the end of the cant. The cant cannot be moved from the general location it is set in by the host club. The competitor may place the cant in any position, at that location, that he desires.
12. A time limit of five (5) minutes shall be set on log chopping to reduce the danger of a competitor injuring himself due to exhaustion. (Added by SFA 3-10-05 as a clarification: those contestants who are stopped by the judges at 5 minutes are not disqualified; they all tie for the last place not won by a contestant who completely severed the log.)
13. The contestant may not in any way influence the severing of the cant with anything but the axe.

LOG ROLLING

1. Each member club may enter one pair of contestants who will work together.
2. The log will be twelve (12') feet long and sixteen (16") to eighteen (18") inches in diameter at the butt end.
3. The log must be rolled from the starting line and kept between two parallel boundary lines sixteen (16') feet apart and sixty (60') feet long, to the end of the course, through the end stakes and immediately back to and over the starting line. At five (5') foot intervals along the boundary lines will be pine lathes firmly driven into the ground. This lathe shall be one inch by one-quarter inch (1" x 1/4") and shall be driven with the long axis perpendicular to the log rolling course.
4. For each lath broken or knocked over during the running time, a five (5) second penalty will be added to the total time of the entry. An additional penalty of twenty (20) seconds will be assessed to the total time of entry for knocking down more than two lathes in succession. Whether a lath is knocked down or not is left to the judges' decision.
5. Any broken lath will be replaced by the judges' representative after each entry has completed the event, but not during running time. It will be judges' particular responsibility to assess if the log passes over a previously broken lath and to determine appropriate penalty.
6. The log must be moved with the aid of cant hooks, peavies or combination tools only.
7. Winners will be determined on the basis of the least time plus penalties.
8. Lath length must provide a minimum of eighteen (18") inches above the ground.
9. A penalty of two (2) seconds will be given for each illegal touching of the log. A five (5) second penalty or disqualification will be given if the log is lifted over a lath. A thirty (30) second penalty will be given for rolling the log over the end lath at the finish line.
10. The host club shall provide a non-competing team to roll the log through the course before the first contestants compete.

POLE CLIMBING

1. Each member club may enter one contestant.
2. The pole will be of any species other than pine (preferably sweetgum or poplar) six (6") to eight (8") inches in diameter at d.b.h. (while still on the stump) and twenty (20') feet in height (after being placed in the ground). The pole will be debarked.
3. The pole will be in the center of a circle eight (8') feet in diameter. The contestant may begin his climb in any manner as long as he remains within the circle.
4. Each contestant will be allowed two (2) attempts, not in succession, to reach the top. If the contestant elects to use his allowed two (2) and reached the top on both occasions, his fastest time will be his time for the event.
5. Practice on the competition pole shall be allowed 1/2 hour prior to competition. Each competitor will be allowed two (2) trial climbs.
6. Contestants may climb in boots, shoes or bare feet. Nothing may be allowed on shoes or bare feet. Prior to the pole-climbing event, the judge shall test the shoes or feet of each contestant to make sure they are not sticky.
7. A contestant's time shall begin when his hand makes contact with the pole; his time shall end when his hands make contact with the top face of the pole. The winner will be the contestant who completes the climb in the shortest amount of time. The competitor has a three (3) minute time limit after his/her name has been announced to start the climb. Otherwise, he/she forfeits that attempt.
8. A marking device (chalk bag, etc.) will be placed at the top of each pole.
9. There shall be at least three judges.
10. The pole climbing event shall be in the afternoon.
11. The competition pole should be debarked at least one week prior to the event.
12. The host club must have a practice pole adjacent to the competition pole to allow for practice.

POLE FELLING

1. Each member club may enter one contestant.
2. The poles will be of uniform species, diameter and height, approximately twenty (20') feet, set firmly in the ground, between six (6") and nine (9") inches in diameter at breast height within a one (1") inch diameter class.
3. At the signal from the judges, time will start and each contestant shall drive a stake provided by the judges in the ground at the full extension of the cord attached to the bottom of the pole. This cord should be 3/4 of the height of the pole.
4. Winning places will be determined by the shortest distance between the edge of the pole closest to the stake and fifteen (15') feet from the stump, and the stake's edge closest to the pole. The pole is to be its original line of contact with the ground. Poles felled more than ninety (90°) degrees from the stake will be measured from the point on the pole which is string distance from the pole stump.
5. In the event that more than one pole touches its stake during the original fall, the shortest time will determine the placing of the winner.
6. The entry will be disqualified if the pole falls before the contestant begins the felling cut, or in any way attempts to influence the fall of the pole with the axe or bodily contact.
7. The contestant may clean the front cut in any way. The back cut can also be cleaned in any manner other than using the hands. The contestant may not return to the front cut after the back cut is started.
8. Time limit is set at ten (10) minutes.
9. **Contestants must wear foot and shin guards during the competition (Added by SFASU, 3-10-05, as result of approval of revised constitution with its risk management plan).**

Technical Events

COMPASS & PACING

1. Each member club may enter one contestant.
2. The compass course must be at least four open traverses (30-50 chains), each with at least four segments. If more than one contestant uses each traverse, they will start at ten (10) minute intervals and will be required to complete one traverse only.
3. Contestants will be allowed the use of a hand-type compass only. Declination will be set at zero (0°) degrees and a true north calibration point must be provided.
4. A traverse must be traveled by each contestant only once. The contestant may not, after beginning the course, return to the starting point.
5. The traverses are to be laid out by representatives of the judges with methods equivalent to using a transit and steel tape. Field notes will be kept and deposited with the Judges Committee before the start of the contest.
6. The portion of each traverse to be traveled by each contestant will have the same number of bearings and the lengths of each will be within one chain of all others.
7. Winning positions will be awarded to the contestants completing the traverse with the shortest distance to the true position of the final corner of the traverse. Winning positions will be awarded to the contestants completing the traverse with the highest relative precision ratio, computed as (**amendment approved ASFC Executive Meeting March 17, 1994**):
$$\frac{[\text{Traverse length}]}{[\text{Linear error (measured)}]}$$
8. All compass and pacing traverse shall be in similar terrain and vegetative type and avoid serious obstacles that affect the magnetic function of the compass and/or the progress of the contestant.
9. Hand calculators may be used.
10. Each contestant must travel his/her entire traverse from start to finish to be credited as having completed the course.
11. Clothing aids to the contestant, such as protective clothing or chaps, shall be allowed.

DBH ESTIMATION

1. Each member club may enter one contestant.
2. There will be a total of ten (10) trees (5 conifers and 5 hardwoods) flagged as the contest is being given, to be estimated by each contestant. Estimates will be made to the nearest one-tenth (1/10") of an inch. All estimates will be ocular.
3. The true d.b.h. measured by diameter tape of each of the ten trees will be recorded by the judges before the start of the contest.
4. The winner of the contest will be the contestant whose list of estimated diameters shall have the least total of individual deviations from the true diameter.
5. Contestants must remain at least ten (10') feet from the trees being estimated at all times.
6. In case of a tie in first, second or third place, additional trees will be given until the tie is broken. The losing contestant in the tie-breaker will automatically gain the next lower position.
7. Estimation shall be by unaided ocular vision. No use of any scaling device, including appendages (hands, thumbs, etc.) shall be allowed.

DENDROLOGY

1. Each member club may enter one contestant.
2. A total of twenty (20) designated trees will be shown to the entire group of contestants.
3. The host club will create a reference list which will be used unless it is rejected by more than 50% of the participating clubs. Textbook of Dendrology by W.M. Harlow, E.S. Harrar and F.M. White, seventh edition, the Manual of the Vascular Flora of the Carolinas by A.E. Radford, H.E. Ahles, and C.R. Bell, and the Guide to Southern Trees by E.S. Harrar and J.G. Harrar are to serve as the primary sources from which the species and nomenclature for this competition are to be taken. No books may be used by contestants in the contest. Equipment permitted for the contest includes optical aids. **(Text titles updated and approved ASFC Executive Meeting March 9, 1994):**
4. Correct answers are those which are submitted to the judges within three minutes correctly identifying the test trees with common names as well as Latin family, genus, and species names. Authors' initials need **not** be after the name.
5. There will be one (1) point given for the correct family name, three (3) points for the correct genus name, and five (5) points for the correct species name. Genus and species must be underlined. One (1) point shall be given for the correct common name. One-half credit will be given for misspelling or failure to underline. Whether or not a species name is wrong or merely misspelled shall be determined by the common name given by the contestant.
6. In case of a tie for first, second or third place after the first twenty trees, those contestants involved will be given additional trees until places are determined. The position winner must, however, correctly identify the tree which eliminates the competitor.
7. If a species name shows up on the dendrology, wildlife or wood identification lists, they will all have the same common name.
8. Tree identification can be made any way the contestant desires (breaking off twigs, crushing leaves, etc.) without killing the tree.

PHOTOGRAMMETRY

1. Each member club may enter one contestant.
2. All equipment such as stereoscopes, scales, dividers, dot grids, protractors, pocket magnifiers, parallax wedges, etc. will be furnished by participants, not the host club.
3. Restriction: Stereoscopes are limited to pocket size, non-reflector, non-electric types. The overall dimensions of stereoscopes will not exceed 3" x 6" x 1" (about the size of the U.S. Army CF-8 pocket stereoscope).
4. The intent of the above restriction is to encourage initiative in developing new devices but only of the type normally useful and applicable to the rugged and remote pedestrian-type field conditions in which foresters commonly operate.
5. Photos will be purchased by a neutral photo interpreter selected by the host club, and will be paid for by the host club. Photos become the property of the host club. The selected photo interpreter will not be a faculty member of any of the participating schools. The test should be made from a state outside of the ASFC member states.
6. The selected interpreter will prepare the exercises according to his/her well-considered judgment, in the number of copies requested by the host club, and with a set of answers. He will deliver them in a sealed envelope to the Dean, Head of the Forestry School or Department or head rules judge of the host institution as requested by the host club. Tests should be checked to make sure all is in order.
7. The official answer sheet should show answers with the correct one in a range, e.g., 10.5 acres +/- 1 acre, to allow for photo paper dimension changes, use of different instruments, etc. A deduction may be shown for another range somewhat less accurate, etc.
8. Suggested source of photos: Committee of Aerial Photography, University of Illinois, Urbana, Illinois 61801.
9. The photogrammetry test will be at least 50% oriented towards interpretation and be a maximum of two (2) hours long.
10. No textbooks, notes or equations may be used by contestants.
11. Manufactured equipment used by contestants may not be altered in any way (i.e., no notes or equations).
12. The stations must be at least five (5') feet apart.
13. Mandatory subject material to be covered includes:

A. Problem dealing with determining ground distance from an aerial photo

B. Determine the scale of an aerial photograph:

1. Formula: $RF = f / (H - h)$

2. Formula: $RF = \text{Photo Distance} / \text{Ground distance}$

(or) $RF = \text{Photo Distance} / \text{Map Distance}$

C. Use a height finder parallax wedge, or parallax bar to determine the height of an object or the difference in ground elevation at 2 separate points

$$h = (H \times dP) / (P + dP) \quad \text{parallax formula}$$

D. Use a ruler on a single aerial photograph to determine the height of a tree or object by the displacement formula

$$(h/H) = (d/r) \quad \text{displacement formula}$$

E. Determine the area on an aerial photograph using a planimeter or dot grid

F. Include on the examination some form of conversion from English units of measurement to metric units of measurement (or vice versa).

POLE CLASSIFICATION

1. Each member club may enter one contestant.
2. A total of ten (10) pole class trees will be designated by the judges.
3. A true classification, based on highest dollar value and as classed by American Standards Association rules will be compiled by representatives of the judges and will be deposited with the Judges Committee before the start of the contest.
4. Four weeks prior to Conclave contestants will be furnished with a duplicate of the dollar yield table and the American Standards Association pole classification table used by the judges representatives to make the true classification. These tables, along with any commonly used equipment, such as tapes, bark gauges, and hypsometers, may be used by the contestants in their estimation. A time limit of one and one-half (1-1/2) hours will be allowed.
5. Each tree will be worth ten (10) points. Four (4) points shall be given for the correct class, minus one (1) point for each class by which it was missed, (but no negative points even if missed by five classes). Four (4) points shall be given for the correct length, minus one (1) point for each five foot length in error (again, no negative points). Two (2) points shall be given for the correct price when class and length are correct. This last would entail a penalty for misreading the price table. One (1) point shall be given for reading the correct price for stated class and length, even though one may be wrong. No points shall be given for a price that does not match the class and length. A cull tree must be entered on the score sheet as "cull". If a class, length and price are given for a cull tree, the score will be zero (0) for the particular tree.
6. The host club must state how the poles were classified and used.

TIMBER ESTIMATION

1. Each member club may enter one contestant.
2. The area to be estimated will not exceed ten (10) acres and will be clearly marked.
3. Contestants will be allowed to use their choice of any equipment commonly used in timber estimation.
4. The judges' representative will make a 100% cruise of the test tract and deposit the results with the Judges Committee before the start of the contest.
5. A duplicate of the volume tables used by the judges and a map to determine the true volume must be given to each contestant four weeks prior to Conclave. Volume table parameters consist of height and d.b.h. Height will be left up to the host club, either merchantable or total height. When tables are sent out the host club must give height of merchantability.
6. Contestants will be allowed one and one-half (1-1/2) hours to complete their cruise and turn in their tally sheets, calculations and estimate to the judges.
7. The closest estimated volumes to the true volume determine the winning places of the contest.
8. The host club must specify cull or not cull in figuring timber volumes.

WILDLIFE

1. The wildlife event will consist of three parts: Identification of bird and mammal species (50%), aging and sexing of selected birds and animal species (25%) and identification of food plants (25%). Scientific names for wildlife food plants must be correctly spelled, capitalized and underlined.
2. Each competing member club shall enter two (2) contestants.
3. Each team will have two (2) minutes to jointly identify each specimen or give other requested information such as sex or age.
4. All specimens used in the contest will come from the enclosed lists. Mammal specimens may consist of skulls, study skins or entire specimens. Plant specimens may consist of fresh material, herbarium sheets, Riker mounts or 35mm color slides.
5. Common names only will be required for mammal and bird specimens, while common and scientific names will be required for plant specimens. Common names found in the book used as the standard for the event shall be used.
6. Contestants may be required to sex white-tailed deer by pelvic girdle and assign age at exact 6-month age classes (1, 1.5, 2, 2.5 years) up to and including age 2.5 and at whole year intervals (3.5, 4.5, etc. years) thereafter by jaw examination. **Amended March 21, 1996.** Contestants may be required to sex bird species in the list designated by descriptive wording, also from wing examination. In the case of the mourning dove, only age will be required.
7. Contestants may also be required to give the wildlife species primarily utilizing the food plants as designated in the enclosed list.
8. In case of a tie, the contest will continue between tying teams until one is eliminated.
9. All mammals, with the exception of the domesticated cat, are described in The Mammals of North America, 1981, 2nd edition, by E. Raymond Hall. The A.O.U. Checklist of North American Birds, 6th edition, American Ornithologists Union of the 1982 Supplement to the A.U.K. Techniques are the official sources for the names of birds. Techniques for aging and sexing may be found in: Wildlife Management Techniques, 1980, 4th edition, edited by S.D. Schemnitz. The official source for the plant names shall be: Manual of the Vascular Flora of the Carolinas, 1983, 9th edition, by A.E. Radford, H.E. Ahles, and C.R. Bell.
10. Each contestant will be allowed to use a 10X hand lens in the wildlife exam and nothing else.
11. The stations must be at least five (5') feet apart.
12. If a species name shows up on the dendrology, wildlife or wood identification lists, they will all have the same common name.

WOOD TECHNOLOGY

1. Each member club may enter one contestant.
2. A total of twenty (20) fresh pieces of wood will be given to the contestants for correct identification. A total of forty (40) minutes (2 minutes per wood specimen) will be allowed for this identification, proper recording and submission to the judges. The specimen will then be passed to the next contestant.
3. Only those woods given in "Key to Coniferous Woods - Gross Features" and "Key to Hardwoods - Gross Features" in Volume I (fourth edition) of the Textbook of Wood Technology by Panshin and deZeeuw may be used as test material. In the event that the key does not differentiate between two or more species on this basis, the judges will advise the contestants as to which name to use. Latin names (genus and species) and common names will be required for answers. The use of a key during the contest is prohibited. Each school shall be sent a list of tree species from which the test will be given by January 1.
4. There will be one (1) point for the correct genus name and two (2) points for the correct species name. Genus and species must be underlined. One (1) point shall be given for the correct common name. One-half credit will be given for misspelling or failure to underline. Whether or not a species name is wrong or merely misspelled, shall be determined by the common name given by the contestant.
5. Contestants will be allowed the use of a 10 to 20 power land lens. The host club will ensure that adequate light is available for wood identification.
6. Only clean, fresh wood samples (no paint, varnish, shellac, etc.) will be used and the contestant will be allowed to cut the wood.
7. In case of a tie for first, second or third place, additional test woods will be given until a runoff winner has been decided.
8. True identification shall consist of identification made by the judges representatives. This true identification must be in the hands of the Judges Committee before the contest.
9. The stations must be at least five (5') feet apart.
10. If a species name shows up on the dendrology, wildlife or wood identification lists, they will all have the same common name.