

For the Contest Host and Coaches

HANDBOOK FOR AMERICAN SOCIETY OF AGRONOMY COLLEGIATE SOILS CONTEST

Southeastern Region
(Last updated 4 March 2014)

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Southeastern Region website: http://clic.cses.vt.edu/SE_Region_Soil_Judging/³

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GENERAL RULES OF THE SOUTHEASTERN REGION

Time Limits

A period of 50 minutes is allowed for judging each contest pit.

- For the first 5 minutes, subgroup I is allowed in the pit, while subgroup O is judging other site characteristics. Subgroup O is allowed to reach into the pit to grab a sample of the A horizon on the pit side opposite the no-pick zones but must not speak to or signal any teammates.
- For the next 5 minutes, the subgroups trade positions.
- Subgroup I is then allowed back into the pit for 10 minutes.
- During the next 10 minutes, subgroup O is allowed in the pit.
- During the last 20 minutes, anyone is allowed in the pit, as long as two members from the same institution are not in the same pit on the same side at the same time.

Site and Pit Rotation Procedures

Pit Construction

- Four judging sites constitute a contest, with a pit in each and slope stakes nearby.
- Each site will consist of a land area bounded by suitable markers and, within this area, a pit that is approximately 15 feet long and 4 to 6 feet deep and that has on each side of each no-pick zone 3 feet or more available for sample collection and a 1-foot buffer between the 3-foot-wide sample collection areas.
- The two no-pick zones should be widely spaced on the left and right side of the same pit wall facing the sun, not shaded by a pit wall.
- The pit should be of sufficient width to allow at least six persons to judge simultaneously at each no-pick zone, three on each side.
- The pits should have a sloping ramp for access.
- The pit should be dug and exposed 10 cm deeper than the maximum depth to be described across the entire pit.
- Distracting features that need to be ignored (such as a prior-disturbed area) should be covered by the host with black plastic.
- The host will place a nail in the third horizon of each no-pick zone.

Handouts to Students

- On the morning of the contest, each contestant will be given a packet containing four scorecards, each of a different color, and the following handouts: the runoff table, the erosion table, the soil interpretation tables, a soil texture triangle, and an official abbreviation sheet (which is posted to the SE Region Soil Judging website: http://clic.cses.vt.edu/SE_Region_Soil_Judging/).
- The handouts should have a watermark to authenticate them as those handed out by the official host.
- No other written guides are allowed for the Southeastern Region, but in other contests additional written or published materials may be allowed.

Equipment Provided

- The equipment that may be used by each contestant includes: Munsell Soil-Color Charts (written guides included in color books must be removed), knife or other handheld digging tool, Abney level or clinometer, dilute hydrochloric acid, 2-mm sieve, and a 10x hand lens.
- Allowable electronic devices include: a simple watch, clock, or calculator and, if needed, a pre-approved device for health or safety reasons (e.g., hearing aid).
- Use of any unapproved device for communication will result in immediate disqualification for any student who has been seen using the device.

Scorecard Labeling

- The SE Regional Soil Judging website provides a template for printing scorecard labels. This is a master list; not all labels will be used because not all teams will have eight members.
- The website also includes a template for printing tie-breaker labels.
- The label sets were created to ensure that the starting pit is staggered so that no more than two students from the same school start at the same contest site.

- If two students from the same school are at the same contest site, they cannot be in a judging pit at the same time and cannot describe the same no-pick zone.
- Each contestant is assigned to start *in* the pit first at two pits and start *out* of the pit first at two pits.
- Each contestant is to describe, as assigned, the left side at two pits and the right side at two pits.
- Students may add their names in case the label falls off.

Grading

- Have individuals familiar with contest procedures verify the answer keys before grading begins and serve as the lead authority for interpreting grading rules.
- Train the graders before grading begins so they are familiar with the nuances of grading the scorecard.
- Provide detailed, written instructions for graders on each scoring table.
- There should be at least one coach at each scoring table.
- Add error ranges for horizon depth and clay% in Part A.
- The official judges must identify the definitive answers on all scorecards. In Part A (Morphology), the judges may list equally acceptable alternate answers that can receive full credit in parentheses below the definitive answer.
- Alternate answers in parentheses in Part A (other than horizon depth ranges) are not to be used to determine correct answers within any other part of the scorecard.
- If lab data is very close to a textural class boundary, alternative acceptable textures, listed in parentheses, will include those within a range of $\pm 4\%$ for clay percentage and $\pm 4\%$ for sand percentage of texture class limits. For example, if a particle-size has 24% clay and 35% sand, both loam and clay loam are awarded credit. If a soil has 15% clay and 50% sand, both loam and sandy loam are given credit.
- The USDA-NRCS Soils website has exact definitions of textural class boundaries (see *Soil Survey Manual*, Chapter 3).
- Provide an example of a graded scorecard to graders, with annotations on questionable or problematic responses. Show examples of poorly completed scorecards.

Nuances

- Each scorecard is to be independently graded twice.
- Each grader should use a different pen color.
- If an answer is illegible (written so poorly that it could be multiple letters, such as when "fr" is indistinguishable from "fi"), it is wrong.
- If an answer is unambiguous, it is correct (e.g., "w" is okay for structure grade; "g" is okay for structure shape; but "bk" is ambiguous and not acceptable for structure shape).
- A dash ("-"), "n", or blank can be used indicate absence of properties such as redoximorphic features in Part A of the scorecard. However, "x" is a non-preferred response in these answers and is incorrect. The "-", "n", or blank may be used when a section of the horizon name should not have an answer. Properties for bedrock horizons are different.
- For R and Cr horizons, all morphological properties (to the right of lower depth) should be indicated as "-" ("n" is acceptable for redoximorphic features). If morphological properties are described or left blank, the answers are wrong.
- Graders should not indicate the correct answer nor obliterate the original answer.
- If an answer is incorrect in Part A, strike through the box edge diagonally, then indicate the appropriate deduction (e.g., -2).
- The second (review) grader should follow the same procedure, striking through the box edge in the opposite corner.
- In Parts B, C, and D, graders should place an "X" by the category heading if the answer is incorrect, but indicate the positive points earned (e.g., +5) for correct answers.

Multiple Answer Categories

- When multiple correct answers are listed for Parent Materials in Part C and for Diagnostic Horizons and Subsurface Features in Part D, points are awarded for each correct answer rather than deducted for a wrong answer.

- Points are deducted when too many answers are provided in any category.
- The minimum score for any category is zero.
- The maximum points for parent material are determined by the number of parent materials recognized by the official judges, with each correct answer worth 5 points. For example, if two parent materials should be marked, and two are marked, each correct answer is worth 5 points and the total score for parent materials is 10 points. If three answers are marked and only two should be and if two of these answers are correct, the total score is 5 points. If three answers are marked and only two should be and if one or none of these answers is correct, the total score is 0. This same approach is used for diagnostic subsurface horizons and features in Part D.

Scoring

- Scores should be tallied down each column and across each row in Part A and double-checked to see that the totals match.
- Separate graders initial their work and grade each section.
- The second grading is done independently and from the beginning, as if the scorecard was ungraded. It is not just a double-check of the math.
- If a discrepancy is noted by the second grader, they should consult with the first grader before making a scoring change.
- The “final” total score should be circled. If a change was made in the original score, it should be crossed out.

Scoring Spreadsheet

- The total scores of all four contest pits are used to determine an individual’s score.
- The total scores of a team’s three highest-scoring contestants at each contest pit are used to determine the team's score.
- A scoring spreadsheet is provided for use in tabulating the individual and team scores and is posted on the SE Regional Soil Judging website.
- It is advisable to have several people work together to enter scores and double-check for entry errors.

- Results should be entered simultaneously into two separate copies of the data spreadsheet on two different computers, if possible.
- The data entry person should enter bogus numbers in a copy of the official spreadsheet to test that the formulas are working correctly.
- Have one person read the graded card scores to the person entering the data in a spreadsheet.
- Have one additional assistant view the screen to check for entry errors.
- The file should be backed up often, with a name including a progressive version number.
- A third assistant sorts all of the entered cards into the proper order by team and contestant.
- After all scores are in, make a backup copy of the spreadsheet.
- The data entry person reads the scores to the person who has them arranged in order to check for discrepancies.
- After that, sort each column to check for the range of scores to be sure none are out of proportion, being careful in the process.
- After announcing the winners, the data cards are now ready to return to the teams along with a copy of the correct answers.

Tie-breakers

- Contestants will estimate the percentages of sand, silt, and clay of a contest pit sample placed in a container by the host at the pit with the fewest soil horizons to allow them more time to complete the answer.
- If two or more students tie with the same total score, ties are broken by awarding the higher finish to the student with the closest estimate of clay, then sand (if needed), compared to the particle-size results.
- If there is still a tie, the clay estimates are summed for all horizons in the “tie-breaker” pit and the grand total compared to the particle-size results grand total.
- The student with the closest grand total finishes in a higher place.

- If two or more teams tie with the same total score, the winner will be based on the closest average clay estimate by the A-D students on the tiebreaker sample.
- If there is still a tie, the sand estimates are compared in a similar manner.

Results

- The contest results shall be announced by the host institution as soon as possible after the contest.
- The announced results will be final.
- The return of the score cards to the contestants after the contest is up to the discretion of the host school.
- After the contest, however, the host school should provide copies of the official contest pit descriptions and a copy of the scoring handed out.
- The host school shall provide suitable plaques or trophies for at least the five highest-scoring teams and the five highest-scoring individuals.

Duties of the Competing Schools

- As early as possible, the competing schools should provide an estimate of the number of students and coaches that they will be bringing to the contest.
- The schools should notify the host of any medical needs, access or mobility issues, special dietary needs, or medicine needed to be taken during the contest.
- At registration, competing schools provide a registration fee in cash or check, along with contact information (lodging location and cell phone numbers) and two copies of a list of student names (printed carefully) using the form provided on the SE Regional Soil Judging website.
- On the evening before the contest, the four representative students should be identified with letters A through D and four alternates need to be identified by a checkmark on the registration form.
- The coach should make the same designations on their copy to use for handing out the scorecards to the correct students.

- Any changes to that list must be made clear to a contest official before the students leave the staging area and should be for such unexpected circumstances as a serious medical or family emergency.
- Coaches should explain the relation of colors to pit numbers, starting pit numbers, pit sequence, the rules for left- and right-side descriptions, and the in-and-out procedure.
- Students should write the pit number and side (e.g., 2-L) on their card and describe only that side of the pit, and they cannot be in the pit at the same time as a teammate.
- Students may put their name on the scorecard.
- It is recommended that only coaches (not students), official judges, and the contest host attend the practice pit review meeting scheduled before the contest.
- It is expected that coaches of participating schools cooperate with each other at the practice sites for maximum time efficiency and that the host facilitate the exchange of cell phone numbers between the official judges and one coach per school for notification of any important changes.

Duties of the Contest Host

- The upcoming contest host provides the date of the upcoming contest to the competing schools as early as possible, preferably at the coaches' business meeting.
- Send out scorecard and Handbook no later than 6 weeks prior to the contest.
- Have everything reviewed thoroughly prior to distribution.
- Use Track Changes or colored text to manage edits to the Handbook and blank official scorecard.
- Notify all coaches of all changes via email or website, or both.
- Number and maintain a copy of all correspondences on a website in case of lost or unopened email messages.
- The host should suggest local lodging and possibly arrange discounted pricing.

- The host school will prepare appropriate contest sites and arrange for neutral, official judges to score the sites.
- The practice sites will be judged by the same official judges, and their scoring will be provided to the coaches prior to the practice judging.
- Maps to the practice sites will be provided at registration, along with any lab or site information.
 - Provide detailed notes on each site, anticipating and answering questions about the description, geology, land use, or soil series.
 - Show work for all calculations on practice pit descriptions given to all coaches.
 - Annotate the scorecard keys (e.g., state the reason for rating a moderate or severe interpretation).
 - Include aerial imagery of each site. Include a topographic map, Digital Elevation Model, and/or 3D drape of each site.
- Practice sites should have a no-pick zone designated by two vertical ribbons similar to the contest pits, with a nail in the third horizon at a specific depth, and the pit face should be large enough to allow access and viewing by four to eight students.
- Put metric tape measures at every practice pit.
- Quality practice pits need to be wide and deep and face the sun most of the day.
- Backhoe compaction rinds and scrape marks on the described pit side should be removed by the host.
- Before the contest, it is customary to have a hosted dinner and an optional educational presentation.
- Include options for special dietary requests, such as food allergies or abstinence from meat or dairy.
- At the hosted dinner, the registration sheets should be handed back to the coaches, who will check spelling of names and assign letters to their representative students as well as a checkmark next to four alternates.
- The host will assign letters to the alternates, then hand a copy of the registration list back to the coaches for final verification on the morning of the contest. This is the copy used to hand out cards by the coaches since the student names will not be on the cards.

- The host should provide a printed list of duties to pit monitors before the contest and review their duties.
- The host notifies the coaches of the time they are allowed to travel to the contest site and provides a map or clear directions.
- The host should be sure there is extra water, a clinometer, an Abney level, a color book, etc. at each contest pit.
- In the Southeastern Region, the host is required to take or collect pictures of the top three placing teams and send the pictures and student names to CSA News, 5585 Guilford Road, Madison, WI 53711-5801 or <https://www.soils.org/publications/csa-news/> as soon as possible after the contest. A picture and/or list of the top 10 individuals should also be sent.
- The host may charge a small registration fee to cover some contest expenses.
- A memento of the contest for all contestants and coaches (such as a t-shirt or souvenir) who pay a registration fee is appreciated.
- An available set of pictures of the pits suitable for teaching purposes is appreciated by all coaches.
- Practice and contest action photos are also appreciated by all.
- After the contest, a review of the answers may be conducted at the contest pits by the host or official judges.
- A rotation schedule (example available on the SE Region website) is provided so that teams have reserved practice times.

Practice Sites

- Practice sites will be available on 3 consecutive days, and the contest will be held on the fourth day.
- Scheduling of practice times and locations is preferred and should include short travel breaks between pits, a lunch break, and bathroom breaks.
- An example rotation is posted on the SE Regional Soil Judging website.
- During the practice week, the students should be shown an example of the landforms, parent materials, and major diagnostic horizons and features as seen in

each of the contest pits. For example, if the contest includes a soil with a fragipan, show the students a fragipan during the week.

- The practice pits should fully educate the students by example, and the contest should serve as positive reinforcement of the important principles of soil science.
- Soils that are not representative or are highly unusual should be avoided in practice and contest.
- Practice pits should not be located in highly disturbed soil or on the very edge of fields, woods, or fence lines where variability is extremely high.
- Allow 6 weeks or more for pit preparation, or 1 week per two pits on average.
- Allow time for the lab data analysis (if any) to be completed and recorded.
- Review the original description answers, if needed, after lab results are available.
- Revisit all pits with official judges to confirm description answers and depths if the described pit face is modified in any way.

Off-limits Areas

- If there is an off-limits area, the host will identify it at registration.
- Violations of digging in or driving through the off-limits area may result in disqualification of the school by the host.

Scorecards and Pit Data Cards

- Scorecards and pit data cards should be color coded to match, using four distinct light colors on waterproof paper with an indelible ink or toner.
- A topographic map may be placed at practice and/or contest sites next to the pit data card to aid the students.

Scoresheet Labels

- Prior to judging, the schools are assigned a number and that number is recorded in the scoring spreadsheet and on the team registration form.
- Up to eight contestants from that school are assigned a letter.
- For national contests, only letters A-D need be printed.

- Letters A-D will be used for the representative team members, and letters E-H will be used for additional students designated by their coaches (by a checkmark on the registration sheet).
- The additional students should be equally divided between pits.
- This division be done by printing all labels, then sorting the team lists by the number of additional judges.
- Pull selected labels from the labels printed earlier to make sets of letters E-H. For example, if school #1 brings six students, they are labeled A through F by their coach on the registration sheet.
- Add the tiebreaker label to the contest pit with the fewest horizons. The sample may be provided in a pail or the third horizon may be used, as long as that is clearly announced.

Distribution of Students in Excess of Four per Team

- If teams 5 and 6 bring one extra judge, teams 7 and 8 bring two extra judges, teams 9 and 10 bring three extra judges, and teams 11 and 12 bring four extra judges:
 - Take the teams with four additional students (teams 11 and 12) and assign E, F, G, and H as their team labels.
 - Match the teams with one additional student (teams 5 and 6) with the teams with three additional students (teams 9 and 10) and make groups of four. Assign the single additional students from teams 5 and 6 the letter E and the additional students from teams 9 and 10 the letters F, G, and H.
 - Match the teams with two extra students each (teams 7 and 8) to make sets with labels E, F, G, and H.
 - There may be more teams with additional unmatched students. Take all mismatched students and distribute them as equally as possible between letters E, F, G, and H.

Managing the Contest

- No communication of any sort (other than words of encouragement or review of procedures) should take place once the contest sites are in view.
- On the morning of the contest, the official scorecards and handouts are given out to the coach of each team, who should then distribute them to the students just before traveling to the contest sites.
- Each student should have one card of each color.
- Two cards should be marked with “R” for right and two with “L” for left.
- Two should be marked with “I” for in and two with “O” for out.
- Students A and E (if any) should start in pit 1, then go to pit 2, 3, and then 4.
- Students B and F (if any) should start in pit 2, then go to pit 3, 4, and then 1.
- Students C and G (if any) should start in pit 3, then go to pit 4, 1, and then 2.
- Students D and H (if any) should start in pit 4, then go to pit 1, 2, and then 3.
- The host should paper clip the cards in proper sequence before handing them out; however, the labels will indicate the proper sequence if the cards become mixed.
- At the contest site, students should be gathered at their starting pit before the contest begins.
- A portable toilet for each gender should be provided, along with water and first-aid supplies in case of illness or dehydration.
- Snacks may be provided during the contest.
- Students should not be left in line for the toilet during the contest unless a monitor is present to prevent conversation.

Pit and Lab Data

- Information provided at practice and contest sites includes the site number, the maximum depth to be described, the depth to the nail in the third horizon, the number of horizons to be described, and flooding and/or ponding frequency.
- If no information is provided on flooding or ponding, it should be assumed that none occurs.

- Lab data, measured or estimated, will be supplied by the host for every horizon at each practice and contest site. This commonly includes organic carbon percent and base saturation percent by NH_4OAc or by sum of the bases (Ca, Mg, K, and Na).
- Dry colors, CEC $\text{cmol}(+)/\text{kg}$ clay, and other chemical data are provided if needed for classification.
- Particle-size is either measured by the pipette or hydrometer method on all horizons of all contest pits.
- If it is not possible to run particle-size analysis on all practice pit horizons, the particle-size should be measured on at least the first, third, and bottom horizons and textures estimated by the official judges before and after the lab measurement. Consistency in method between practice and contest sites must be maintained.

Pit Rotations

- Pit sequence is indicated on the scorecard labels.
- A loud noise such as a horn is used to notify all pit monitors when to uniformly begin the 50-minute pit judging. The pit monitor for pit 1 may be asked to sound an air horn to start each rotation.
- Adequate time must be scheduled for travel by students between pits.
- Completed scorecards are delivered to the scoring area after the end of each 50-minute period.
- Consider time of sunrise when scheduling start of first practice rotation.
- Schedule times for teams, allowing more time at the sites on the first day of practice.
- Mix the teams that are in the practice rotation each day.
- In the Southeastern Region Contest, include, for each day, at least one pit for teams to share.

Maps and Directions

- Maps and directions should be turn-by-turn.
- Specify driving time and distance.
- Indicate locations of nearby bathrooms, providing some portable option if needed.

- Have a third party test drive the directions.
- Provide adequate signage/markings, especially at turns at/near sites.
- Provide coordinates and street addresses for GPS navigation (or name of nearby business, attraction, etc.).
- Suggest nearest places for lunch or groceries.

Duties of the Official Judges

- The official judges are to describe and evaluate each site according to the general guidelines set forth in this handbook.
- An official judge and the contest host are to be present and available during the week to answer questions.
- A scorecard for each practice site and for all contest pits is provided to the official host, complete with the preferred answers at the top of each box and any alternate acceptable answers listed below.
- The contest pit descriptions should not contradict the practice pit descriptions.
- Properties seen in the contest should not be recognizable to the students simply because they have been educated by example or by instruction during the practice week and by the contest handbook and supplemental material.
- Sometime before the contest, at least one of the official judges should be available to answer questions pertaining to soil judging policies and regulations. This usually is done both at the practice sites and at the coach-judge pit review meeting.
- Judges are discouraged from selecting no-pick zone locations within the pit where horizon boundaries fall precisely on limits that are used in determining answers in other sections of the scorecard. For example, a horizon boundary at the top of a root-limiting contact should not fall on a breakpoint that allows two alternative answers in the interpretations section to be equally correct.
- Consider sun direction when orienting the long axis of pits.
- Prepare an extra individual contest pit in case of problems (wetness, collapse, classification issues, etc.).

- All no-pick zones (zones between the ribbons) in the same pit may have different morphology, interpretations, and classification so long as the maximum potential score is the same.
- Follow the spirit of using the contest as an educational activity.
 - When describing practice pits, consider whether the described properties can be arrived at by a reasonably able, coached, and practiced student using only allowable contest materials and equipment.
 - When describing contest pits, consider whether the described properties were shown to the students in a practice pit or reasonably explained by the contest host.
 - For all pits, consider whether the described soils are reasonably representative of the soil resources and not very unusual or unexplainable without advanced experience and knowledge.
 - Consider whether the soils are described consistently (i.e., patterns are maintained) between both practice and contest pits.
 - Remember that students do not memorize soil series properties or need to identify the series. Their entries on the description sheet are based purely on what is observed, which may not match the series that is mapped in the area.

Slope Stakes

- Slope stakes should be placed to reinforce the identification of the landform and landscape position in every case. For example, if the pit is in a recent floodplain or terrace, the slope stakes should NOT be aligned on a surface sloping up toward an upland perpendicular to the source stream.
- As another example, if the pit is in a shoulder position, the slope stakes should also be in a shoulder position so that they indicate the same slope percentage as the ground where the pit is located.
- Slope stakes should straddle the pits on the same landform and position as the pit, aligned to mimic the flow of surface water from the site.
- If the landform or position is too small for the placement of two slope stakes, the pit should be relocated to another site.

- At every site, use sturdy slope stakes at least 48 inches long, hammered at least 8 inches below the surface. When installed, slope stakes should be at least 36 inches above the soil surface and should be sufficiently stable to not move at the base.
- Measure slope precisely (geometrically) and confirm with a clinometer or Abney level.
- Ensure that slope is not on a break point between slope classes. If so, reposition the stakes.

Duties of the Pit Monitors

- Monitors should announce starting and rotation times uniformly as per the following the example.
- A few minutes before starting, make announcements such as:
 - We will begin in a few minutes when the horn sounds or when I tell you to begin.
 - This is pit _____. Be sure to use the _____ colored card.
 - Mark the pit and the side that you will describe in the upper left-hand corner, matching the label on the card.
 - Do not disturb the soil in the no-pick zone. When time ends, you must put down your pencils.
 - Any marks made after that will result in disqualification at this pit.
 - Scorecards are never returned to a contestant after they are turned in to the pit monitor.
 - Only the students with the letter I on their contestant number should enter the pit in the first time period.
 - Any student may reach into the pit to gather a sample of the top horizon only, but not above where any other student is standing in the pit.
 - Written guides included in Munsell color books must be removed.
 - No written materials can be in your possession during the contest, other than those allowed by the contest host.
- Use the following example for an 8:00 AM start time. Adjust for different starting times.
 - 8:00 AM – “Only the I student group may enter for 5 minutes.”

8:03 AM – “Two minutes left before the I student group must exit.”

8:05 AM – “Change groups. Only the O student group may enter for 5 minutes.”

8:08 AM – “Two minutes left before the O student group must exit.”

8:10 AM – “Change groups. Only the I student group may enter for 10 minutes.”

8:18 AM – “Two minutes left before the I student group must exit.”

8:20 AM – “Change groups. Only the O student group may enter for 10 minutes.”

8:28 AM – “Two minutes left before the O student group must exit.”

8:30 AM – “Free-for-all period begins. Any student may enter for 20 minutes.”

8:48 AM – “Two minutes left.”

8:50 AM – “STOP. Put your pencils down. Turn in your cards immediately and go to the next pit (give directions). The next pit judging starts in 10 minutes.”

Start and End Times

- Pit monitors should accept scorecards between the start and end of the 50 minutes; scorecards handed in after the end of 50 minutes should be marked “LATE” across the face.
- If a line forms for turning in scorecards at the very end of the time limit, monitors are to make sure the contestants have put their pencils down and are not marking on the cards.

Spoil Removal

- The pit monitor should have a shovel available to clean out the spoil in front of the no-pick zone (removed at least 10 cm below the maximum depth to be described) between rotations and whenever the lowest depth to be described is covered.
- They should also remove excess spoil adjacent to the no-pick zones.
- Monitors should not allow contestants to pick in the no-pick zone.
- Contestants may not touch the tape or ruler, but they may ask the pit monitor to attach extra nails if the tape is blowing in the breeze and unreadable.
- Contestants may spray water lightly on a dry pit surface but not cause soil to flow.

- Altering or deforming the no-pick zone by excess spraying is prohibited.
- Deep excavation from the sides and behind the no-pick zone is prohibited.

Depth Tape

- Monitors should check the tape or ruler between each rotation to be sure the depth to the nail in the third horizon has not changed.
- If soil has covered some of the depth marks, the tape should be cleaned off.
- During the contest, if a student reports that the depth of the nail in the third horizon does not match the depth given on the posted contest pit information during the rotation, the monitor should announce the discrepancy as soon as possible.

Communications During the Contest

- Students may ask for extra water, a clinometer, an Abney level, a color book, etc. at each contest pit.
- Monitors should be able to contact the contest host rapidly by phone in case emergencies or questions arise.
- Talking about anything related to the contest, site, or soil resources will not be permitted, except with the pit monitor or contest host, after the students begin their journey to the contest site and before the contest ends.
- If the pit supervisor observes a violation of this rule, or any other form of cheating, they should immediately collect the scorecard of the individual(s) involved and record a zero for that pit.
- The contestants may write notes from memory on their handouts after leaving the presence of their coach and teammates and after discarding all notes and printed materials except the handouts.
- Use of communication devices or examination of guides or notes not written on the sheets handed out the morning of the contest is considered cheating.

Coaching Visits During the Contest

- At the discretion of the host, coaches may be permitted in the area of the pits during the contest.
- Coaches will be permitted to examine the pits after the contest begins.
- No communication between team members or with the coach(es) is permitted while the contest is underway.