STEMley 2025 Rule Changes

Revision: Sept 11th, 2025



- 1. **Draft order:** 1-8, 8-1 (same as District events). Any undrafted teams should remain ready in case they are called in as backups.
- 2. **Double elimination playoff structure:** playoffs will follow the double elimination structure used by *FIRST* in the 2025 season.
- 3. Ranking Points: scoring will follow Team Update 21 including:
 - a. CORAL RP: at least 7 CORAL must be scored on each of 4 levels. If Coopertition is achieved, at least 7 CORAL must be scored on each of 3 levels.
 - b. BARGE RP at least 16 BARGE points must be scored.
- 4. Robot weight limit: increased by 5 lbs to 120 lbs (without battery or bumpers)
- 5. **Second Drive Coach:** teams are allowed the option of a second DRIVE COACH in lieu of a TECHNICIAN.
- 6. **STEMIey BONUS CORAL:** two special STEMIey CORAL game pieces will be in play at the STEMIey Cup Championship. These BONUS game pieces are dimensionally similar to the regulation white CORAL but are painted red and blue in colour.

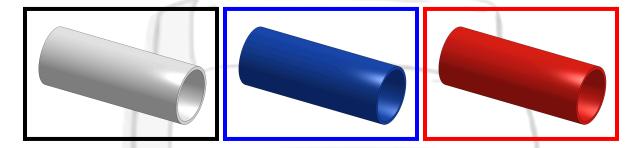


Figure 1: Regulation white CORAL Figure 2: STEMley blue CORAL Figure 3: STEMley red CORAL

Prior to each MATCH, one BONUS CORAL will be placed in each of the ALLIANCE SUBSTATIONS. The BONUS CORAL is in addition to the normal complement of game pieces staged before each match.

One BONUS CORAL per ALLIANCE may be entered into the playing field by the ALLIANCE'S HUMAN PLAYER through the CORAL STATION in the last thirty (30) seconds of the MATCH. If introduced early as determined by the REFEREES, a FOUL will apply and that BONUS CORAL will not be eligible for any BONUS scoring.

The scoring condition for BONUS CORAL is:

- a. at the end of the match, each BONUS CORAL scored on levels 2 (L2), level 3 (L3), and level 4 (L4) of the REEF will have the effect on scoring of adding one "virtual CORAL" on an immediately horizontally adjacent REEF BRANCH.
- b. if neither the REEF BRANCHES to the left or right of the scored L3 or L4 BONUS CORAL is vacant then the virtual CORAL is applied to the REEF BRANCH directly below the scored BONUS CORAL if vacant.
- c. if the REEF BRANCHES to either side and below the scored L3 or L4 BONUS CORAL are all occupied, the virtual CORAL will be counted as an L1 CORAL.
- d. a BONUS CORAL scored on L1 will have the virtual CORAL added to the counted L1 CORAL total.

<u>Example 1</u>: a BLUE ALLIANCE robot places a BONUS CORAL an L4 REEF BRANCH. At the end of the match, no CORAL is present on the BRANCH to the left of the BONUS CORAL. The BLUE ALLIANCE gets credit for two L4 CORALS (one BONUS and one virtual).

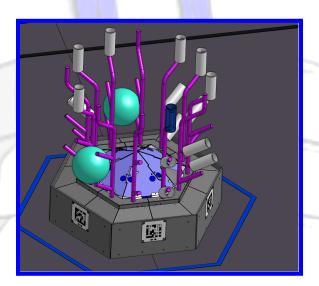


Figure 4: Illustration of Example 1

Example 2: a RED ALLIANCE robot places a BONUS CORAL on an L3 REEF BRANCH. At the end of the match, the L3 REEF BRANCHES to the left and right of the BONUS CORAL are occupied. The REEF BRANCH directly below the BONUS CORAL is vacant. The RED ALLIANCE gets credit for one L3 CORAL (BONUS CORAL) and one L2 CORAL (virtual).

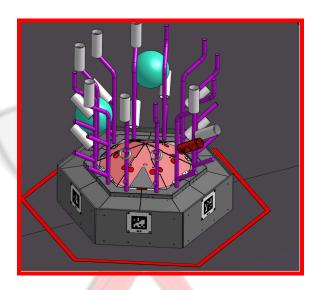


Figure 5: Illustration of Example 2

<u>Example 3</u>: a BLUE ALLIANCE robot places a BONUS CORAL on L1. The BLUE ALLIANCE gets credit for two L1 CORALS (one BONUS and one virtual).

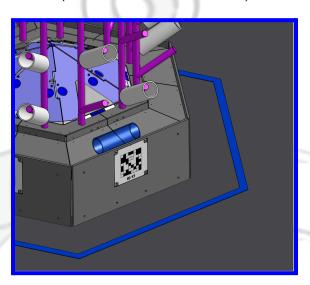


Figure 6: Illustration of Example 3

BONUS points due to BONUS CORAL (if any) will be added to the MATCH SCORE prior to the posting of the official final MATCH SCORES. The ruling of the HEAD REFEREE is final.

Note: in fairness to teams who prefer to handle ALGAE, STEMley organizers attempted to source a red and blue version of ALGAE. We were unable to secure ALGAE with similar physical characteristics to the regulation ALGAE so, unfortunately, there will be no BONUS ALGAE at STEMley.