

## Chunkin 2024 Official Rules

**Remember there is an element of danger with creating and operating a siege machine.**

Please be aware that this is an evolving event. Although this event was specifically created as a fundraiser for the Lake County Farm Bureau Scholarship Fund, we want this to be a fun, friendly, and safe event for the local community to enjoy. We do welcome any suggestions and feedback. These “Official Rules” are meant to ensure that all participants are competing on the same level and that everyone, including spectators, are safe at all times. If we feel the need to make last-minute changes to these rules, we will let anyone already entered at the time know and also explain why we are making such a change. This will not be meant as an inconvenience.

The contest will consist of multiple heats. Each heat will have 3 machines competing. Machines will be competing for distance. Time for each heat and the number of “chunks” allowed will be determined on the day of the event depending on the number of machines entered.

Please, please, test fire your machine before the event. Time will be limited, and we will not be providing a lot of time to work out any issues you may have. You will need to know the capabilities of your machine.

### **Event Description**

Accurately launch a projectile into a target area using only the energy from a falling counterweight.

### **Trebuchet Construction Guidelines:**

Arm - 10 feet in total arm length (excludes counterweight, sling, and sling hook – sling hook can be a maximum 6”)

Projectile - 8lb – 10lb Pumpkins

Counterweight - 500 Pounds maximum.

Maximum Height: 12ft with arm in stored position.

Machines must be mobile.

Teams will be competing for distance. However, there will be a “target zone,” where all pumpkins must land. This zone will be down range from the machines and will have side boundaries. The width of this zone is yet to be determined. Once this is known, it will be posted here. If you have questions regarding this, please contact us.

**MAXIMUM distance is 450'**

**Note: For 2024, only Fixed Arm and Floating Arm Trebuchets will be allowed in this competition**

## **Rules:**

1. Twelve-foot height limit measured with the arm in the stored position. Total arm length shall not exceed ten feet.
2. The sling and or cocking mechanism is not included in the ten-foot length. The sling hook should not extend more than six inches beyond the arm.
3. No digging into the ground is allowed. But you are allowed to firmly anchor your trebuchet to the ground to reduce movement.
4. Trebuchets are only to be gravity powered. No physical pushing or shoving of the counterweight will be allowed.
5. Trebuchets must be triggered remotely from at least six feet away.
6. Trebuchets must have a safety mechanism to prevent the accidental firing of the machine while it is being armed.
7. No energy can be stored in deformation of components. That means no springs, rubber bands or flexible arms. The counterweight must be securely attached to, not looped over, the end of the arm.
8. The Trebuchets will be inspected for safety. Any parts that are unnecessarily loose must be tightened. No parts of the Trebuchet other than the projectile are allowed to become completely disconnected from the trebuchet (A partial disconnect, one side for the sling, is necessary in order to release the projectile). Any Trebuchet deemed to be unsafe will be disqualified.
9. Counterweights must not come free during competition. If a counterweight falls off, the trebuchet operator must operate with the remaining counterweights. If the trebuchet becomes inoperable due to a loss of all counterweights, it must be declared lost and removed from the competition.
10. Qualification at check-in does not represent permanent qualification. Trebuchets are subject to random checks at any time. This is done to prevent a) illegal modifications to trebuchets, b) overcome deficiencies in the volunteer qualifiers' judgment, and c) ensure safety.

11. All trebuchets must be brought to the contest assembled and tested beforehand. The trebuchet must appear and be demonstrably safe to our judges in a test launch prior to the contest. Any misfire or failure must not be capable of hitting the bystanders or the operator in any way.
12. All trebuchets must be mobile. There will be some time constraints for the competition. Setting up your machine to fire and packing it up for transport should be done in a timely manner.
13. For FFA Chapters competing in the event: A non-student adult mentor over age 18 years of age is required to supervise and assist in the construction of the trebuchet, and to be the safety director for each team.
14. Day of competition: There will be a limit of six team members allowed in the trebuchet operating area during the firing of the machines. There may be up to ten team members in the area assisting in the set-up and take-down of the machines.
15. For FFA Chapters: An adult safety director will be required in the operating area in addition to the six team members.
16. All persons in the trebuchet operating area must always wear a hard hat and safety glasses, both for set-up/take-down of machines, as well as firing of machines.
17. It is your responsibility to make sure that you understand the rules, and that your trebuchet meets the requirements. Our failure to 'catch' illegal trebuchets before the tournament does not take away our right and responsibility to correct such mistakes later.

**Divisions:**

- a. Youth Division
  - i. This division is currently (2024) open to any FFA Chapter wishing to participate.
  - ii. There is a perpetual trophy and plaque with this division, as well as the opportunity to display the winning machine on Lake County Farm Bureau's parade float in the following year's Kelseyville Pear Festival Parade.
- b. Open Division
  - i. This division is open to any group in the community wishing to participate. This may be a business team, a civic organization team, or just a group of friends looking to have some fun! We are currently limiting this division to nine entries, on a first come basis.

- ii. Entry fees for this division will be \$250. There will be cash disbursements for 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> place teams.

**Launching and Winning:**

- c. Teams will get three qualifying firing attempts.
- d. The team with the longest single launch will be declared the winner in each division.

**Safety:**

- Trebuchets will be inspected at check in, before loading, and immediately prior to each firing.
- Trebuchets must have a **“safety device”** (like a “prop block” or solid rod) to stop the throwing arm from firing prematurely.
- Another **“safety device”** is a steady support which can be placed directly under the counterweight, to prevent falling.
- The trebuchet must have a trigger mechanism that allows the operator to fire the device from six or more feet away.
- Counterweights must be removable and weigh no more than 50 pounds each, and no more than 500 pounds total.
- Counterweights may be weighed, marked, and approved by the safety officer at check in inspection.
- The Safety Officer will determine if the trebuchet is safe. If not, we will try to help make it safe, time permitting.
- Only six team members and one safety director may be in the vicinity of the device when firing.
- Only the **“range master”** may give permission to fire. Unauthorized firing may lead to expulsion /disqualification.
- Only one machine will be fired at a time.

- **Warning, once the counterweight is lifted, the trebuchet is dangerous. No hands, feet or any body part in the potential path of the throwing arm or counterweight. Lock your safety on immediately after the counterweight is lifted and prior to loading.**

## **Distance Contest**

Rules:

1. Each trebuchet will be given 3 launches and only the longest will count toward the final standings.
2. Trebuchets will be lined up with the pivot point of the arm in a specific location marked in each teams throwing area.
3. All distance measurements will be measured from the pivot point of the arm to the point of first impact.
4. The projectiles will be provided by the event officials. The projectiles should weigh 8-10 pounds, depending on our supplier's availability, and are roughly the size and weight of a bowling ball.
5. In the event of a tie, a "tie breaker" heat will be set up with the tying machines having the opportunity to "chunk" three more pumpkins. The farthest "chunk" will be the winner.

## **Competition Time**

Each heat will be given a single 25-minute time slot. This time will be for set-up, take-down, practice and qualifying. Each team in the heat will be allowed two practice chunks and three qualifying chunks. This time allotment may be modified on the day of the event.

## **Setup, Testing, and Competing**

Punkin Chunkin will provide each team with a total of 5 pumpkins on the day of the competition. Once all entries are confirmed, heats of three teams will be formed. In your designated heat and time slot, you will move in and set up your machine. Once all three machines have been set up, you will be allowed to test fire one pumpkin. Time will be allowed to make some adjustments if necessary. A second round of test firing will be allowed. Time will then be permitted to make more adjustments. Following this, each team will have the chance to fire three

pumpkins for competition. After all three teams have completed their three competition shots, take-down and removal of machines will take place to allow for the next heat.

### **Additional Information**

Contact Lake County Farm Bureau – 707-263-0911 or [lcfarmbureau@sbcglobal.net](mailto:lcfarmbureau@sbcglobal.net)  
Or Daniel Suenram, Event Chair 707-245-6063 or [suenramd@gmail.com](mailto:suenramd@gmail.com)

### **Websites to Learn More About Hurling Things:**

[www.trebuchet.com](http://www.trebuchet.com) (plans, kits, resources)

[www.algobeautytreb.com](http://www.algobeautytreb.com) (the algorithmic beauty of the trebuchet)

The information on these sites is for reference purposes only.

**Remember there is an element of risk with creating Medieval Siege Weapons.**  
**Always practice safety first!**

It is encouraged that teams come up with names for their machines. Teams may also think of a “chant” or “cheer” to be used from the sidelines by supporters during the competition. We are trying to make this a fun and friendly competition between FFA Chapters as well as community based teams. We want to make this an event that the community will come out and enjoy, so keep in mind to make this family friendly.