

SAFETY ON THE ROPES COURSE

Long Term Issues and Maintenance

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Safety is Important to Ministry

- ▣ Safety is critical to the ministry potential of a ropes course. Much of the safety concerns are very immediate and straightforward.
- ▣ Gear must be working properly, staff must be working properly, participants must follow directions, etc.
- ▣ These have immediate consequences, so they are usually addressed fairly directly at most camps.
- ▣ But there are other concerns that aren't as immediately pressing, as they build up over time.

Staff and Training

- ▣ Training is probably the single most important factor in safety, because it allows us to identify when issues arise in other areas.
- ▣ All facilitators have some level of training before they are running ropes course elements.
- ▣ But who are they trained by, and how do they know how to train them?
- ▣ Many organizations train internally, passing knowledge from one group of staff members to another.

Internal Training

- ❑ While I am all for camps training their own staff members, there are a few things to watch out for:
- ❑ If certain details are overlooked and left out of training, since it has usually been a year between sessions, those small pieces that disappear may not be critical by themselves, but they build up.
- ❑ To combat this tendency, camps should have all of their procedures, especially for ropes course written out, in detail, and provided to staff members.
- ❑ This allows people who retain data better visually a better chance to learn the material, and provides a backup source of info to help recognize if some aspect is being overlooked during training sessions.
- ❑ Ideally whoever is leading the training process should have some outside source of information, to broaden their perspective on what is considered safe and acceptable beyond the camp.

Rescue Training is Critical
for Leaders on the Course.
Always have a rescue trained
staff member on property
when using the course.



Industry Standard Practices

- ❑ There are many people running challenge courses and other climbing events all over the place.
- ❑ They continue to learn and adapt their operations as new information, equipment, and standards are developed.
- ❑ Having a connection to that process is important.
- ❑ No one should be using Gold Line rope anymore, or Swiss seats, or butt belays, or strand vices, or non locking carabiners, etc.
- ❑ There are too many known issues that have been discovered and rectified to avoid future injuries to justify not being a part of that process.
- ❑ There are obvious legal ramifications to ignoring standard practices.
- ❑ Actual official standards are different, more specific, and will vary by state. (ACCT, ASTM, ANSI, UIAA, etc.)

Physical Elements

- ▣ The elements that you are climbing on are the second link in the chain of keeping climbers safe.
- ▣ Regular inspections are important
- ▣ Routine maintenance will be required even if nothing else goes wrong.

Inspections

- ▣ Inspections are key to maintaining a safe course and environment.
- ▣ Staff should inspect everything visually during daily setup.
- ▣ Course Manager should inspect everything closely monthly and after bad weather
- ▣ An outside inspector should add a fresh set of experienced eyes annually.

Things to look for



Monitor your Guy Line Anchors



Inspect your gear for wear,
Especially items installed out of reach.



Aluminum Wears Against Steel



Even hardened steel will wear



Stuff Breaks



The proper equipment is helpful for maintenance tasks



Routine Maintenance

- ❑ Maintenance varies between pole courses and elements built in trees
- ❑ All cable clips (U-Bolts) should be tightened to the correct torque (45ft-lbs for $\frac{3}{8}$ " hardware)
- ❑ Pounding in staples to tighten them, especially on pole courses where the wood dries out
- ❑ Treat dead wood annually to prevent rot
- ❑ Lengthening backup cables as trees grow
- ❑ Loosening lag bolts and adjusting platforms as trees grow
- ❑ Adding woodchips in high traffic areas and landing zones to prevent soil compaction, protect trees, and soften landings
- ❑ Modifying elements for new challenges for repeat campers

Backup Cable Carrying Weight



Platforms-Bolts Sucked into Boards



Tree Growth has separated the 45s





Modifying Elements

- ▣ There are lots of things you can do to refresh or modify your elements, either to alter the level of difficulty, or just make them newer or more interesting experiences.
- ▣ Many ideas don't require altering the safety systems, and therefore less engineering.



Climbing Gear

- ▣ Not just elements out in the weather, but the rest of the safety gear should be regularly inspected as well.
- ▣ Ropes are the prime focus, with usage logs
- ▣ Harnesses are susceptible to wear as well, and should be replaced every 7-10 years. Usually the stitching is the best weak point to test.
- ▣ Helmets are less critical in general, so they don't always have a strict retirement cycle.
- ▣ Carabiners should be inspected for smooth functionality on a regular basis.

Gear Storage is Important



Entire Construction Boxes can be moved to storage in Winter



Access Restriction is for safety as much as theft prevention

