

Who we are and Why this exists.

We are a group of climb trainers representing multiple bioregions that have come together in order to put forth a series of in-depth orientation packets detailing the safest way possible to climb and rig rope structures in the forest. We are out there putting our lives on the line in order to defend what we believe in. It is of the utmost importance that we stay safe while doing this. It is our hope that in putting these packets out a more universal safety protocol will develop. Knowledge of safe climbing methods isn't something that should only be held by a small minority of "trainers". This is the first packet in the series and it is open to amendments and changes. Please copy this and distribute it widely. If you have comments or questions or would like an electronic copy of this packet you can get ahold of us Via E-mail at:

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STAY SAFE

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Earth First!

Climbers Guild



VOL. I

CLIMB TRAINING ORIENTATION FOR BEGINNING
ASCENDING AND DESCENDING.

Climb Training Orientation for Beginning Ascending and Descending.

YOU MUST LEARN TO MID LINE DESCEND ON YOUR FIRST CLIMB!

Knots to Learn

- Rethread Figure Eight
- Eight on a bight
- Double Fishermen
- Water knot
- Prusik knot
- Girth hitch

Pre-climb Checklist

Equipment, minimum:

Harness: Tree (arborist) harnesses are very padded, used for long time periods on rope. Rock harnesses are for short term climbing.

Carabineers: 3 locking, 1 non-locking with webbing on it for descender (the webbing helps protect the 8 from nicks), extras are useful.

Descending Device: figure 8 is most commonly used

Prusik loops: lead prusik loop, foot prusik loop w/ safety loop and webbing for foot, and one or two extra rope loops.

Heavy Glove: or some other heavy fabric to hold while descending

Clothing:

Lightweight clothes, preferably more tightly fitting

Shoes with a good sole

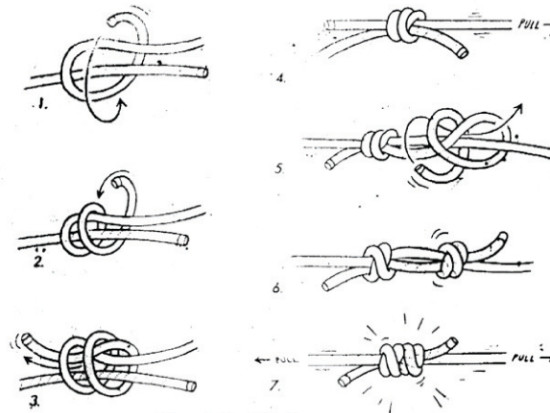
Hair-ties for all hair lengths

Empty large items from pockets or secure items in zipper pockets, and tuck in or remove jewelry.

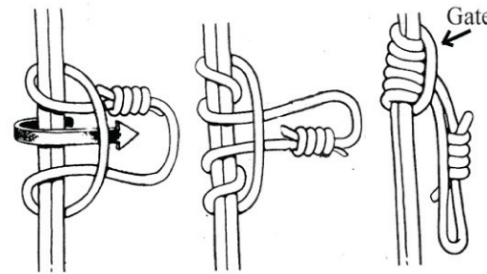
Climbing gloves- bike gloves or snug-fitting garden gloves work great.

Gear Safety Check:

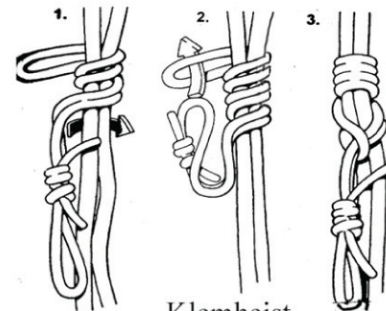
1. Tape on any gear (prusik loops, carabineers) could indicate that the gear may be retired. Duct tape is corrosive and shouldn't be on any active gear. Trainer should know why tape might be on gear.
2. **Harness:** Check for frays in webbing, function of buckles, split stitching, defects, etc.
3. **Carabineers:** Check gate and screws to see if they are in good working



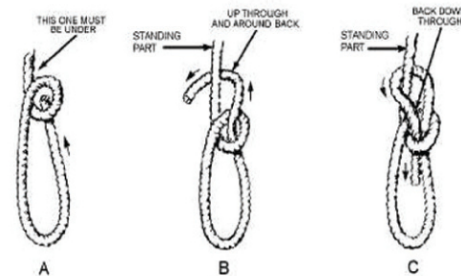
Double Fisherman



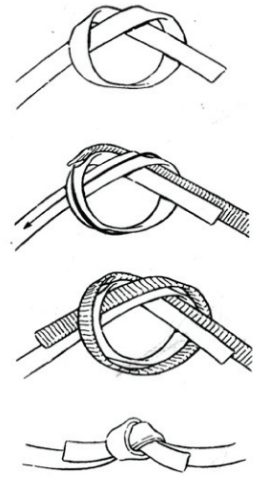
Prusik



Klemheist



Bowline

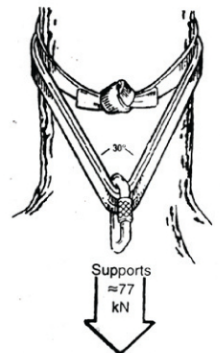


Water Knot (Ring Bend)



ANCHORS

Girth Hitching will down grade rope strength by 1/3 to 1/4.



a Wrap 3-Pull 2 tie-off could yield anchor strength as high as 77kn (18,000 LPN) if the angles are kept less then 30

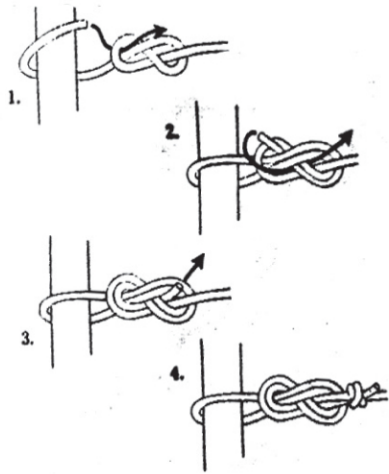
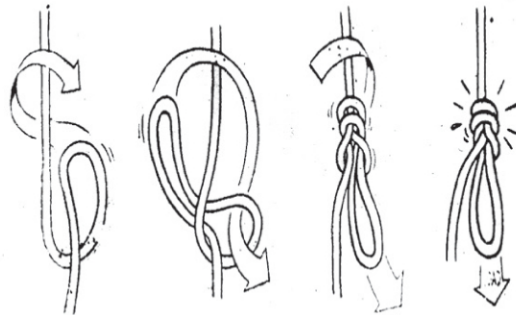


Figure 8 follow through



In-Line Figure 8

KNOTS

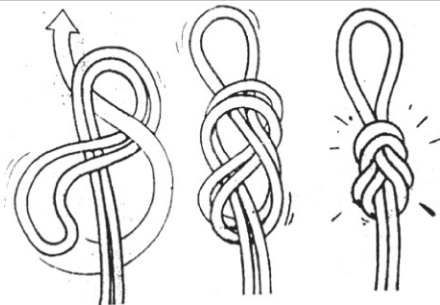
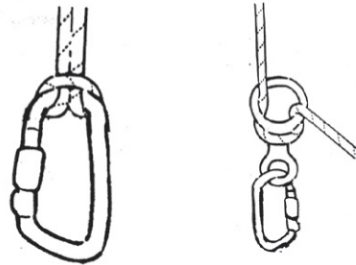
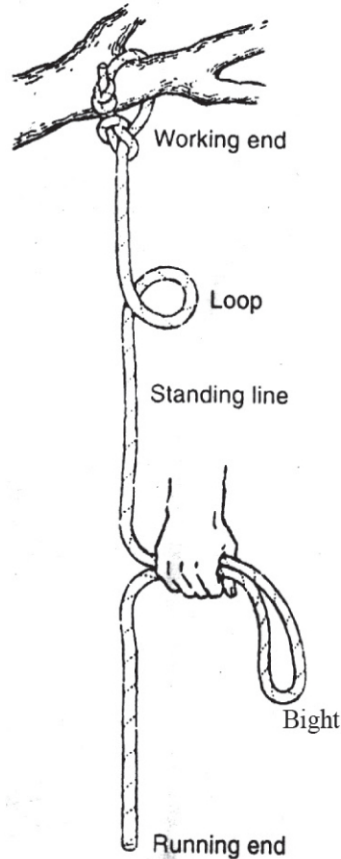


Figure 8 on a bight



Girth Hitch on a Carabineer

Properly faced Eight.



Parts of the rope.

order.

4. **Descending Device:** check for small fractures, burrs, deep surface scratches, etc. Worn finish is usually o.k.. You should know if this device has been dropped, if so put tape on it and mark it to be destroyed.

5. **Prusik and Climbing Rope:** Check for frays in sheath that reveal the core, flat spots, hard spots, chemical burns, excessive tree sap, any visible core, correct knots (double fisherman, or rethread figure eight. Knots should have at least a 1 1/2 inch tail after the knot). Foot Prusik should have a correctly tied water knot in the foot loop webbing and a girth hitch to connect the loop to the Prusik. The climb line should have a figure eight or monkeys fist knot on the end of it.

THE PSYCHOLOGICAL ASPECT OF CLIMBING: WHAT YOU SHOULD FOCUS ON AS A TRAINER / CLIMBER

CLIMBER: it is your and your trainer's responsibility to know the following before you climb.

- You should know at all times the dependability and experience level of your trainer. If you don't feel comfortable with the trainer, do not climb. If you have communication problems with the trainer, do not climb. If the trainer seems unfocused, do not climb.
- You should ask as many questions as possible to feel confident in each aspect of climbing at any point of concern. You should always know what you're getting into and why. Make sure you are comfortable with what you are going to be doing. Know each aspect of the climb (safety, ascending, descending, midline descent) before you start climbing.
- Be sure to maintain awareness and a calm body and mind. If you aren't well rested, maybe you should learn to climb another day.
- Do not try anything your trainer has not instructed you to do.
- Keep your safety and others in mind at all times.
- Maintain two points of safety at all times while climbing. No exceptions.
- You should know all the knots listed on the knot page & how they are applied and used.
- Know how a rappel device works and how to use it.
- You should have inspected all the gear with your trainer (see gear safety check).
- Make sure you & your trainer have checked all safety points.
- Make sure your gear fits.
- If you have taken drugs of any kind do not climb.

TRAINERS SHOULD KNOW THE FOLLOWING: it is your responsibility to make sure the climber reads this paper and climb safely and responsibly. People's lives depend on it.

- You must teach a climber how to mid line descend on their first climb
- You are potentially placing someone's life in danger if proper safety techniques are ignored.
- You must be a confident and very experienced climber before you are a teacher - no exceptions. You must know all aspects of climbing gone over in the EF!CG vol. 2.
- You must stay mentally connected at all times with the climber. Do not allow yourself to become distracted by anything. If some one else is talking to you besides the climber tell them you must focus on the climber and not to disturb you.
- You must know what bad gear looks like and should know the history of the gear being used.
- If the climber seems uncomfortable with this training tell them there is no rush in this training and they should maybe wait for another day.
- You cannot be under the influence of any drugs.
- You must be alert and focused. Do not teach someone if you are not mentally prepared to.
- Remember to have patience.
- If possible it is best to have two lines next to each other so as a trainer you can go up next to the person.
- If two lines are not possible then it is a good idea to rig training lines so they are anchored at the ground and then pass through a crotch in the tree, over a sizeable branch, or through a pulley anchored to the tree or other structure. This allows the trainer to belay a climber from the ground if they were to freeze up while climbing. Only attempt this if you are familiar with belay techniques as you will be in total control of the person's decent and subsequent safety.
- If you feel a climber isn't ready or capable to climb safely then you have a responsibility to that person and the campaign to refuse training. You are the trainer and it is your call don't let anyone guilt you or pressure you into a training you don't feel comfortable giving.
- Remember you are a role model, so set the safest example possible. You reflect the campaign. Safety is cool, showing off is not. Don't let your ego get in the way.

Once the climber has read over the climbing guide, gone over all the knots, checked and assembled harness and rig, **and gone through a climbing demonstration**, they may climb under the trainer's supervision.

you do this.

14. Be **VERY** careful not to get anything caught in your 8. Hair and loose clothes get easily sucked in. In a few cases peoples' nipple rings and even breasts have been caught in 8's so this can't be stressed enough.

15. Watch out for branches, and how far from the ground you are.

16. As you approach the ground slow down and prepare to come to a slow connection with the ground. Approach in a nicely balanced manner with your feet as downward as possible. Keep your knees nice and bent. Be careful not to step on the line when you come down. Come all the way down to a squat before stopping to make sure all the tension will be off your prusik knot.

17. Once you are on the ground undo the figure 8 from its carabineer, take it off the climb line, and return the figure 8 to the harness. Make sure you do this right away as after long repels the 8 will heat up and if left on a line could cause degradation of the line because of the heat. Take the lead prusik off its carabineer and the climb line and return it to an extra carabineer on the harness. Take off the harness and put it in a safe spot (i.e. not in the dirt). Careful not to step on the rope.

18. Talk to your trainer about any problems or anything you need clarified. Make sure you thank your trainer. Talk to them about your climb and spend a moment reflecting on what went well and what to work on next time.

19. Then bask in the glory of having just climbed up into a magnificent tree.

20. Are you ready for a more advanced training?

Note on midline descent: This method is good for the first time going up a rope and not exceeding 10-20 feet. Once the climber has become comfortable with this method they should be shown how to take off the foot prusik loop from the climb line. The easiest method for this is to hang from the lead prusik and bring your right foot up as if you were sitting cross legged. Wrap the running end of the rope around your foot 4 times and then cross your left leg over your right foot so that the wraps are in the bend of your left knee. This will prevent the wraps from coming undone while you remove the foot prusik loop. Once the foot prusik loop is off the line then you should be able to step with your left foot directly on top of your right foot pinching the climb line loops between them. Holding sharp downward pressure with your right hand on the running end of the rope you can then stand up and slacken you lead prusik. This will put you back into a position to start repelling once you have shaken off the loops of the climb line from your right foot.

4. (This is an informational step, no action) In order to descend you must loosen your lead prusik and get it within reach, then transfer your weight to your figure 8 belay device,

_____ 5. So, to continue, Step back into your foot loop and step up slightly to enable yourself to pull more slack out between your eight and your foot prusik loop. You will need to pull out several inches of slack so make sure you have enough clearance between your foot prusik and eight

_____ 6. Now that you have the tension off of your lead ascending loop you should be able to bring it down to just above your foot loop at eye level.

_____ 7. At this point you will need to be wearing the heavy glove on your right hand and you need to **hold the running end of the line with sharp downward pressure** placing your hand on your butt so you are in essence sitting on your hand.

_____ 8. Now you're in position to rappel but whenever switching points of safety (in this case adding a third point with the eight) it is important to redo the ABC's to double check all points of safety.

_____ 9. Step down and transfer your weight onto the eight while holding the tension with your right hand which you are sitting on.

_____ 10. Reach up with your left hand and loosen your foot prusik loop.

_____ 11. With your left hand hold your loosened lead and foot prusik knots. The way to hold it is by making a peace sign and actually pushing down the lead prusik from just above it instead of grabbing the knot directly. If it tightens up you won't be able to slide down the rope. If you start going to fast you want the prusik to catch and stop you. People have a natural tendency to grab on when falling and if you were to grab the prusik knot you could prevent it from catching. Thus the peace sign and grabbing above the knot as opposed to grabbing the knot itself. The lead prusik knot should be at about eye level just above the 8 and stay there the entire descent. Once again it is really important to make sure you slide the prusik knot down with you at eye level. If it catches you have to do this whole process over.

_____ 12. Start to slowly loosen your grip with your right hand. Let the rope feed through the 8 and your prusiks. Don't ever grab the lead prusik tightly. Remember to hold the lead prusik loosely and let it slide along the line. The lead prusik will push down your foot prusik so you only really need to concentrate on the lead prusik. The grip of your right hand will be controlling your speed.

_____ 13. Do not go fast. If you start to go too fast, tighten your grip on the line with your right hand. If you're going too fast or at any time feel out of control or unable to continue to grip the line let go of your lead prusik. This will catch you. Remember that you'll have to step back up to loosen it again if

SAFE CLIMBING STEPS AND THE ABC'S OF CLIMBING: (assuming all gear is safety checked, you know the knots and the mental aspects of climbing)

Now you're ready to climb!

For clarity these directions are for right-handed people. Left-handed individuals need only to reverse the steps that make a right/left distinction.

1. Harness:

- Pull harness up over your hips. The upper strap should rest on top of your hipbone.
- Make sure to double back your harness belt and keep the harness snug. A belt not doubled back or a harness too loose is as good as no harness at all. Double your leg straps if there are any.
- If your harness is too big, or too small, switch it out for a better fitting one.
- Do not ever hang or put any of your weight on the accessory loops, located on the sides of the harness.

2. Carabineers:

- Attach carabineers through loops on front of harness. The exact loops and positioning of carabineers varies from harness to harness.
- When looking down on carabineers make sure that the gate is facing out and away from your body. When locking the screwgates should screw down, think; "Screw down, so you don't screw up!"
- You should have three carabineers facing the correct way, the left hand one is for your lead prusik, the center one is for your foot prusiks safety, the right hand one is for your eight to be attached later. You should have another carabineer on your right accessory loop with your figure 8's big loop clipped into it (so you can later transfer your 8 with out dropping it). The carabineer that has the 8's big loop in it could have webbing over it for extra protection.

3. Prusik loops:

- Attach lead prusik loop to climb line with Prusik knot and then use a girth hitch to attach to left hand carabineer. Lock carabineer.
- Next attach foot Prusik loop to climb line with prusik knot. Let hang.
- Attach safety prusik loop to the foot prusik loop. Attach with a girth hitch on the side of the foot prusik loop that doesn't have the fisherman's knot.
- Attach safety prusik loop to middle carabineer. Lock carabineer.

4. Before climb ABC's:

A) Anchor: Hang on the climb line to ensure it is safely attached and will not fall. Know exactly how it is anchored.

B) Belt/Buckle: Are all your harness buckles doubled-back (leg and belt)? On New Tribe tree harnesses make sure your delta steel link is screwed down.

C) Carabineers: Make sure only one rope is attached to any one carabineer. Make sure all carabineers are locked and in the correct position. When locking carabineers don't over tighten. If a carabineer is too tight, the extra pressure of hanging off it can cross thread it making it really freakin hard to unscrew.

D) Devices: A device is whatever you are actually using to climb. In the instance of ascending up a line the devices are your ascending ropes. Make sure the knots are dressed correctly and you have two points of safety. In the instance of repelling (i.e. a mid line descent) the devices are your figure 8, and your safety prusik rope. Check over yourself, your knots, and your gear (do I have an 8? Do I have an extra carabineer and prusik?) Also make sure nothing is tangled.

E) End of rope: Is the end of the rope close enough to the ground? How good is the knot on the end of the rope?

F) Friends: Make sure that there is ground support that can hear you.

G) Gear: What extra gear will you need once up a tree?

H) Hair: When climbing & descending pull back your hair or it will get caught in the figure 8. This goes for facial hair, loose clothing, & even nipples!

This is very important!

If you have any more questions ask your trainer. If you don't want to climb, now is the time to speak. But otherwise, have fun!

Ascending

1. The first thing to do when attached to a line and about to ascend is to understand about the prusik "gate" and how to loosen it to slide the knot up. The "gate" is the part of the knot where the rope crosses over itself. The prusik knot is designed to be able to slide easily on a climb line when there is no tension on it but as soon as any weight is applied; the knot tightens & locks on the climb line. To loosen it first make sure there is no tension on the knot then push the gate back with your thumb. To lift it pull it up with two fingers on either side of the climb line right under the knot. Kind of "pushing it back, and hooking it up".

2. Give a little jump and slide up your lead prusik as high as it can go. Take a seat and hang from it. You may swing a little but that is natural.

3. Make sure the climb line is between your legs and put your foot into

the foot loop. It should rest in the middle of your foot. Take any weight off the foot loop (keeping your foot in the loop), loosen & pull the foot prusik up as high as you are able (your foot goes up as you pull it up). Make sure to leave at least 5 inches between the lead prusik and the foot prusik knot.

4. Grab the climb line under your lead prusik knot, step up into the foot loop and bring yourself into a squatting position.

5. From this squatting position you're going to loosen your lead prusik knot (keep your fingers hooked under it). Now stand up fully in your foot prusik and slide up your lead prusik as you do.

6. Once the lead prusik is pushed up as high as you are able. Let go of the knot, sit back in your harness, and repeat this process over again until you reach about 10 feet off the ground.

A lot of people have a hard time with sliding the foot prusik up because they keep their knee straight when trying to push it up thus creating an amount of force just enough to stop the prusik from sliding. The prusik won't slide if there is any pressure on it.

MID-LINE DESCENT

IF YOU ARE LEARNING TO CLIMB YOU MUST LEARN TO MID LINE DESCEND. LEARN THIS AT ABOUT 10 FEET FROM THE GROUND ON YOUR FIRST CLIMB (this ensures no one panics high-off the ground and has to learn it in a bad spot).

1. Slide your lead prusik up as high as possible and then hang from it.

2. Slide your foot loop up to a comfortable height. Now, take your foot out of the foot prusik loop. Make sure you can get your foot back into the prusik at a later time.

3. Make a bight and push it up through the big hole on your figure 8 (it should be hanging on an accessory carabineer on your right side). Then slide the end of the bite up over the small hole. Unclip the eight and clip the small loop into your right carabineer and lock it. Make sure your eight is facing the right way with the rope exiting on the side of your repelling hand. (See picture). Pull up on the tail end of the rope (towards the top of your head) and pull down on the standing line to get the slack out between your 8 and lead prusik knot. Make sure all slack is taken out.