More Slick Tricks

By Mark Adams

In the April Climbers’ Corner, I discussed various aspects of using a throwline. I suggested some possibilities for throwing and setting up the throwline and presented several methods of maneuvering the throwline in the tree to isolate a particular crotch. This article continues the discussion of manipulating the line and concludes with an example of how a throwline can be used to help set lines in a specific situation. The intent is to encourage greater use of throwlines, stimulate discussion, and inspire others to share their favorite ways of using this valuable tool.

This article uses the following abbreviations:

- tl = throwline
- tw = throw weight
- tw1 = the weight that was thrown
- tw2 = the weight at the other end of the line.

Stick Trick

I’ll begin by revisiting the stick trick, an old and fairly well-known way of isolating a rope in a particular crotch. It is similar to the loop trick, which was introduced in the previous Climbers’ Corner, but it is used in different situations. The loop trick is used when the string is in the desired crotch, with one leg of the string in the route where you want the rope to go, but you cannot bounce the weight to get the second leg parallel to the first.

In contrast, the stick trick is used when the throw goes over the target branch, plus other branches above or beside the point where you want the line to be. For example, in Figure 1, you want the line to isolate branch 1. If you try to pull tw1 up and over branch 2, then the throw weight will most likely flip over and fall below branch 1 as well. For the stick trick:

1. Tie the end of the rope to a dog-leash snap. Use a knot that is fairly large and heavy, such as a bullet knot, monkey’s fist, throwing knot, or tightened hangman’s noose.

2. Clip the snap to the throwline just above tw2. The snap should be able to slide freely along the string right up to the ring of tw2. You may want to clip a steel carabiner to the ring of tw2 to help the rope stay on the branch and to help manipulate the descent of tw2.

3. Pull the rope into the tree until it is just over branch 1, then let tw2 fall back to the ground. Remove the string from tw2 and tie it to tw1 to create a continuous loop of throwline.

4. Pull tw1 into the tree so that it goes over branch 2 and catches on the snap, then pull the snap and rope to the ground.

Figure 1. The stick trick.
monkey's fist, throwing knot, or tightened hangman's noose.

2. Clip the snap to the throwline just above tw2. The snap should be able to slide freely along the string right up to the ring of tw2.

3. Pull the rope into the tree until it is just over branch 1, then let tw2 fall back to the ground.

4. Pull tw1 into the tree so that it goes over branch 2 and catches on the snap, then pull the snap and rope to the ground.

In Figure 1, step 2, a steel carabiner has been clipped to the ring of tw2 to help the rope stay on the branch and to help manipulate the descent of tw2. In step 3, the string has been removed from tw2 and tied to tw1 to create a continuous loop of throwline. This setup can be helpful if there is a chance that tw1 will get hung up in step 4 when it is pulled over branch 1 and back to the snap.

If branch 1 is somewhat high, the weight of the rope may pull the whole setup back down. Experience will help with judging when this situation may occur, but depending on the type of tree and configuration of the crotch, I find it begins to happen with shots in the range of 40 to 50 feet high. To counter this problem, you can add bights, turns, or both to create a bigger, heavier knot to catch in the crotch. Or, rather than using a rope in step 1, use another throwline and throw weight. The steps for this alternate stick trick are shown in Figure 2:

1. Using a steel, locking carabiner, clip one throw weight from the second throwline to tw2 (on the first throwline).

2. Pull tw2 (with the carabiner and second throwline attached) up and over branch 1.

3. Let the tw2–steel carabiner–second throwline unit fall to the ground, manipulating it as needed.

4. Unclip the carabiner from the two throw weights, tie the rope to the second throwline, and pull it into and through the crotch.

The carabiner is necessary because of the added friction of the second throwline. This alternate stick trick can be very helpful for high shots when the rope would pull the throwline out of the tree. But if you think that the rope will stay in the tree in Figure 2, steps 2 and 3, use only one throwline. The rope has to be pulled into the tree for both methods, and there is no point taking out a second throwline when one will work well.

**Two for One**

Now look back at Figure 2, steps 3 and 4, and note the separate throwlines over the two branches. You have just isolated two crotches with one toss of the throwline. Granted, in this example, one of these lines was not suitable for working or climbing, but often times the line goes through or over more than one strong crotch. When this happens, consider whether they can both be used. Even if the second crotch is not ideal for working the whole tree, you might want to set a lowering line, speedline, or second climbing line for part of the tree and eliminate some additional throwing or climbing necessary to set that line.
Swing Shot

Another way to isolate two crotches with one throw or simply to move the throw weight in the tree is the swing shot. An example of moving the throw weight is shown in Figure 3. The throw has landed on the target branch. One leg of the string is in the desired location, but there is a branch that prevents the climber from bouncing and swinging the weight to get the second leg parallel to the first. To manipulate the second leg with the swing shot:

1. Tie a dog-leash snap to the climbing line using a bullet knot, monkey’s fist, throwing knot, or tightened hangman’s noose.
2. Clip the snap to the throwline just above the throw weight already in the desired position (tw1 in this example).
3. Pull tw1 (with the climbing line attached) into the tree, over the crotch, and down until it hangs slightly higher than the branch that prevents the string from getting parallel to the first. Note that if you let go of the string, tw1 will fall to the ground.
4. While you continue to hold the rope, use the throwline to swing tw1.
5. As tw1 swings toward the target branch, let go of the throwline so that the trajectory of tw1 carries it over the branch.
6. Manipulate tw1 as needed and let it fall to the ground.
7. Pull tw2 into the tree so that it catches the dog-leash snap, and pull the rope to the ground.

This procedure can help get the throw weight around the trunk and is useful when working through watersprouts and vines and going over branches that are so close to the target branch that you cannot get enough swing with the throw weight alone. You can also use the swing shot to manipulate first one and then the other end of the rope to get the rope completely around the main stem or trunk. Experiment with moving the bullet knot or dog-leash snap up and down to achieve different angles of swing when you release the throw weight. If the original throw is through a good crotch and you want to use the swing shot to isolate a second crotch for another rope, proceed with steps 1 and 2 as described above. In steps 3 to 5, swing the weight over the second crotch that you want to use. At step 6, the rope is on one of the desired branches, and the string is through the second target crotch. Tie the second rope to tw1 and pull it into the tree and over the second crotch. The second rope will catch on the dog-leash snap, and you can pull both ropes to the ground—one on the first crotch and one on the second.

Retrieving a Throw Weight: The St. Bernard

As I’ve mentioned, there will be times when the throw weight gets stuck. Here are two similar, although slightly different, ways to retrieve a stuck throw weight. They will not work in all circumstances, but they can save a bit of aggravation in some situations.

Take a look at Figure 4:

1. Using a second throwline (the first one is stuck in the tree), throw into a crotch somewhere above the stuck throw weight.
2. Remove tw2 from the second throwline, tie on a carabiner, and clip the carabiner around the first throwline.
3. Hold the stuck throwline steady, and using the second throwline, pull the carabiner into the tree until it is close to the stuck throw weight. Bounce or pull the carabiner so that it lifts or unwinds the stuck throw weight.

For the variation of the St. Bernard:
1. Place the second throwline.
2. Tie a loop or large slipknot in the second throwline and tie the ends of the second throwline together.
3. Pull the loop into the tree and use it to snag or lift the stuck throw weight.

This trick also can be used to loosen and lift hangers. Sean Gore told me that he once tied the loop as a slipknot and used the St. Bernard to retrieve a friction saver that had inadvertently been left in a tree.

**Another Useful Trick**

I've described just some of the various ways a throwline can be used to facilitate working with trees. Other tricks can be improvised as the situation requires. Such tricks might be used only once or twice a season, or you might devise something that you find can be applied in many other circumstances. The following trick fits into the first category. It has been used only a handful of times in the last six or eight months. Nonetheless, it is very helpful, and some of the concepts could be applied to create more tricks for other situations.

On one job last fall, two of a number of trees that were to be removed were dead. These were loblolly pine (Pinus taeda) trunks, 40 to 50 feet tall. They were too dead to climb and were located in a woodland garden, so there was no room to drop them whole. There was a live pine close enough and big enough that we wanted to individually “hang” the dead pines (that is, tie a rope near the top of the dead pine; thread the rope through a high, strong crotch of the live pine; cut the dead pine at its base; and then cut off short chunks until the pine was small enough to be laid onto the ground). But there were no branches left on the dead pines on which to place a throwline (and then a rope) from the ground. We proceeded as follows (Figure 5):

1. We placed a throwline in a high, strong crotch of the live pine.
2. To one end of the throwline, we tied a rope and the other end of the same throwline.

4. We took the end of the rope that was to be tied to the dead pine and tied a running bowline around the base of the dead pine.
5. We used the matching end of the throwline (that is, the one that was on the same side of the crotch as the dead pine) and secured it to the bowline part of the running bowline; thus, when we pulled the running end of this throwline, it would widen the loop of the running bowline.
6. Then we secured a second throwline to the loop of the running bowline at the back side of the dead pine.
7. We pulled the running end of the rope and the first throwline to, respectively, raise the running bowline and keep it open so that it would not tighten too low on the trunk of the dead pine. The second throwline, at the back of the dead pine, was used to pull the back of the rope away from the trunk so that the rope would “hop” up the tree and not get stuck on bits of bark and swollen collar areas.
As with any tool, the more you use a throw-line, the more uses you will find for it. If you have some other slick tricks or have comments or suggestions regarding types of line, types of weights, methods of storage, or other throwing techniques, please share them. Log onto the ISA Web site discussion group (www.isa-arbor.com), send them to the editor of Arborist News, or e-mail them to me. New tricks, questions, or suggestions for future topics are always welcome.

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