PRUSIKING

Using the Prusik knot is one way to ascend a fixed rope if unable to climb unassisted.

Sometimes it is impossible to continue climbing up a rock face. Weather conditions, the steepness of the route, the difficulty of the route, and the physical condition of the climber may separately or together make it impossible to continue. Options may include going back down or traversing off from the face; however, sometimes the only option is UP! The ability to Prusik up the rope (or ascend using another mechanical devise) means freeing other climbers to continue climbing while you prusik. It also means self-sufficiency so that a rescue organization doesn't have to be called out to extract you from the face of the rock.

What you will learn from our classroom discussion and practice at our next climbing outing is how to climb up the rope using the Prusik knot in a safe manner. You will learn how to tie the Prusik knot, what factors might cause the knot to fail and what safety precautions you must take to prevent failure. You will demonstrate competency by ascending a 30-foot face using this technique.

The reason the Prusik knot works is that you can slide it along the rope without having to retie it.

The Prusik knot is tied in a sling around a rope such as the climbing rope. Specially tied Prusik Slings make it easier to ascend the climbing rope or secure it from moving. Prusik Slings are usually tied using the Grapevine knot instead of the Water knot. The Grapevine is not quite as strong, but stays tied with no worries.

The Prusik knot is tied by wrapping the Prusik Sling around the rope and through itself several times – a two or three or four wrap prusik….It is wrapped in the same direction for all wraps. Once wrapped, the "inside" loop is pulled tight. (A picture is worth a thousand words!).

After the Prusik knot is tied around the climbing rope, it must be made tight in order to hold. The Prusik knot should never be "shock loaded", that is have a large force applied to it all at once. Prusik knots will fail when shock loaded. Also when a load is applied gradually, the knot should be monitored / managed to assure that it grips securely around the climbing rope.

When finished supporting a load and you want to release the grip on the rope, simply unwrap the knot a bit and you can then slide the Prusik knot along the rope. It is in this way that a Prusik can be used to ascend a climbing rope.

Be careful when testing the Prusik knot! It grips very well right up to the point where it slips, if it is going to slip. Then it slides pretty well. You can imagine two students one pulling on the sling and the other pulling on the rope just at the point where the knot fails!

Some questions –

1. What would you do differently if the rope is icy (covered with snow)?
2. What could you use instead of a Prusik if you forgot yours and needed to improvise?
3. What risk do cavers have that climbers usually do not while Prusiking?
4. What safety precaution is a must for cavers (specific to prusiking)?