HOW TO TIE THE 25+ MOST PRACTICAL ROPE KNOTS

SAM FURY

Illustrated by DIANA MANGOBA
WARNINGS AND DISCLAIMERS

The information in this publication is made public for reference only.

Neither the author, publisher, nor anyone else involved in the production of this publication is responsible for how the reader uses the information or the result of his/her actions.

Consult a physician before undertaking any new form of physical activity.
CONTENTS

Introduction
Knot Tying Terms
Rope Care

Knots
Choosing the Right Knot
Stopper Knots
Loops
Hitches
Bends
Lashing

Survival Roping Techniques
Descending
Ascending
Improvised Harnesses
Self-Rescue Bowline
River Crossing with Rope
Making a Gill Net
Making Rope
Throwing Rope
Bonus Materials
Author Recommendations
Survival Fitness Plan Training Manuals
About the Author
INTRODUCTION

Anyone can tie “lots of knots”, but a proper knot will be stronger and easier to untie. It will also help to conserve rope as you will use less (lots of knots uses more than needed) and having to cut the knots out is less likely since they are easier to untie.

There are many knots, far too many for the average person to remember. Fortunately, there is no need to remember them all. Just being able to tie a handful of knots is enough to see you through any situation when a knot is needed.

*The Useful Knots Book* is a no-nonsense how-to book on tying the 25+ most useful knots. It comes with easy to follow illustrated instructions and tips on when to best use each knot.
KNOTS

Although in reality you can use any knot any way you wish, most are designed for specific tasks. They are grouped into five broad categories.

For ease of learning, the categories are presented in a progressive manner.

Stopper knots come first because they are often used as a base knot for tying other knots. They are also easier to tie. Next are loops, then hitches, bends, and finally lashing.

**Stopper Knots**

Stopper knots are useful to add weight to rope, to use as handholds (in a lifeline, for example), to stop rope from slipping through a hole, to stop cut rope from fraying, etc. When tied around the standing end of a rope, they can also be used as a backup to prevent knot failure.
Loops

Loops are usually made by tying the rope to itself to create an enclosed circle. Their main use is as attachment points—as holds to climb up or to clip a carabineer onto, for example.

Hitches

Hitches are useful in securing the rope to an object (a boat to the jetty, for example) or around a log you wish to drag.

Bends

Bends are used to join two or more lengths of rope together. They can be useful in repairing broken rope or for creating a longer length from two shorter ones.

Lashing

Lashing is used to join objects together. It becomes very useful during construction.
CHOOSING THE RIGHT KNOT

All the knots in this book are useful, but there will always be one that’s most useful, depending on what you need it for.

To decide which knot to use, you must consider the characteristics of each knot. Gaining in one characteristic will usually mean compromising on another. You must find the knot with the best balance of characteristics for a given job.

Getting the Job Done

You must choose a knot that will fulfill the purpose it is needed for. For instance, a lashing will be more effective in binding two objects together than a loop knot will.

Security

The security of a knot is its ability to stay tied and tight—that is, not come undone on its own. Constant pressure (or lack of it), thrashing (in the wind or water), vibration, and other movements may compromise the security of a knot.

It will make sense to choose the most secure knot you can, but remember that increasing one characteristic will decrease others. For example, a very secure knot may become very hard to untie, which may be a problem if fast release is a requirement of the job you need it to do.

Strength

Every knot will weaken the integrity of the rope, some more than others. The strength of the knot refers to how much the knot weakens the rope.

When the task at hand (climbing, rescue, or dragging a load, for example) requires the rope to hold weight and/or take shock load,
this characteristic becomes important, especially if specialized rope isn’t available.

**Ease of Tying**

When something must be tied quickly or repeatedly, then ease of tying becomes more important. You don’t want to spend five minutes tying a knot you have to make more than once.

**Ease of Untying**

There are circumstances where you may want the knot to be easy to untie, such as if you want to release the knot quickly without cutting the rope.

At other times, you may want the knot to be more difficult to untie, such as when you want to make it difficult for an animal to release itself, or to stop other people from being able to easily untie it.

Another factor is how easy the knot will be to untie after it’s done its job. Some knots are designed to be easy to untie even after considerable tension has been applied, or after the rope has swelled underwater, or both.
LASHING

Lashing is used to join objects together. It becomes very useful during construction. You will need to have quite a long running end for all lashings.

Square Lashing

Square lashing is used to hold poles together at a 90° angle.

Place two poles together in a cross, so that the vertical one is on top of the horizontal one. Tie a clove hitch on the vertical pole, below the horizontal one. Pass the running end under the horizontal pole (on the right side of the vertical pole), then over the vertical one (on the upper side of the horizontal pole). Then pass the running end under the horizontal pole on the left side, and pull it tight, so that the clove hitch slips to the right side of the vertical pole.

Continue to pass the rope over the verticals and then under the horizontals, moving counterclockwise. Pull each pass tight as you go. Make three full rotations.

The long end of the rope should end up underneath the right side of the horizontal pole. Bring it back over the front of the horizontal pole, and then behind the lower end of the vertical pole. This is called frapping. Pull it tight.
Go over the left side of the horizontal pole and then under the top side of the vertical one, and pull the rope tight. This is one frapping rotation. Do a total of three frapping rotations and then tie a clove hitch on the lower side of the vertical pole.

When doing the clove hitch, make sure you pull the first half hitch tight before doing the second.

Trim any excess away and/or tuck it under the lashing.

**Diagonal Lashing**

Diagonal lashing can be used when the poles don’t cross at right angles. It’s also useful when the poles need to be pulled toward each other for tying.

Cross two poles on top of each other and tie a surgeon’s knot around them horizontally, so that the running end is to the right. Pass the running end back behind the poles, so it’s on the left side. Bring the running end horizontally over and under the poles. Pull it tight. Do this three times.

The running end should finish on the left. Go over the bottom left pole and then under the cross, so it comes over the top vertically. Pull it tight.
Do three vertical turns and pull tight after each one. Your running end should finish running down.

Do some frapping turns by passing the rope under and then over each pole counterclockwise. Keep it tight. Do three full rotations.

Finish it off with a clove hitch and trim it if needed.

**Sheer Lashing**

A sheer lashing is good for joining poles together in a parallel fashion.

Put two poles together side by side so they lie horizontally. Tie one clove hitch around both the poles, to the left of where you intend to make the rest of the lashing.

Lay the short end horizontally between the two poles to the right of your clove hitch, so that you will lash over them. Wrap the running end around the two poles, pulling it tight after each turn. Do enough turns to ensure that the lashing is the same length as the width of the two poles.
Do frapping turns by passing the rope between the two poles on the right side and then coming back up between them on the left. This should be hard to do since you pulled the lashing turns tightly.

Do two frapping turns and finish with a clove hitch around one end one of the poles.

**Note:** You can place wedges in between the two poles instead of frapping.

**A-frame Lashing**

An A-frame lashing is the same as a sheer one, but with looser lashing and frapping turns. Pull the legs apart to make the A-frame.
SURVIVAL ROPING
TECHNIQUES

The methods described in these bonus chapters make use of some of the knots described in the main part of this book. These are techniques which you may find useful when in a survival situation.

**Warning:** The following techniques are reserved for “no-other-option” survival situations. If you choose to practice them ensure you take all the necessary precautions and care to ensure your safety.

The following information is from the book *Emergency Roping and Bouldering* by Sam Fury.

DESCENDING

The technique for rappelling with only a rope is known as the Dulfersitz method.

For this to work, you need a rope that’s at least twice the length of the distance you wish to descend and that’s strong enough to hold your weight.

Find the middle of the rope and wrap it around a solid anchor. Ensure it’s not rubbing against any sharp edges and test its stability with all your weight. Jerk on it to make sure.

Pass both ends of the rope between your legs from front to back, and then to the left of your body, over your right shoulder, and down your back.

For comfort (and if you have the resources) you can put some padding around your shoulders and groin.

Hold the rope in front with your left hand and at the back with your right.
Plant your feet firmly against the slope about 45cm apart, and lean back so that the rope supports your weight. Do not try to hold yourself up with your hands.

Step slowly downwards while lowering your hands one at a time.
Dear Reader,

Thank you for reading *The Useful Knots Book Preview*.

If you would like to purchase the full book please visit:


Thanks again for your support,

Sam Fury, Author.
SURVIVAL FITNESS PLAN TRAINING MANUALS

Survival Fitness

When in danger, you have two options: fight or flight.

This series contains training manuals on the best methods of flight. Together with self-defense, you can train in them for general health and fitness.

- **Parkour.** All the parkour skills you need to overcome obstacles in your path.
- **Climbing.** Focusing on essential bouldering techniques.
- **Riding.** Essential mountain-bike riding techniques. Go as fast as possible in the safest manner.
- **Swimming.** Swimming for endurance and/or speed using the most efficient strokes.

It also has books covering general health and wellness, such as yoga and meditation.


Self-Defense

The Self-Defense Series has volumes on some of the martial arts used as a base in SFP self-defense.

It also contains the SFP self-defense training manuals. SFP Self-Defense is an efficient and effective form of minimalist self-defense.


Escape, Evasion, and Survival

SFP escape, evasion, and survival (EES) focuses on keeping you alive using minimal resources. Subjects covered include:
• **Disaster Survival.** How to prepare for and react in the case of disaster and/or societal collapse.

• **Escape and Evasion.** The ability to escape capture and hide from your enemy.

• **Urban and Wilderness Survival.** Being able to live off the land in all terrains.

• **Emergency Roping.** Basic climbing skills and improvised roping techniques.

• **Water Rescue.** Life-saving water skills based on surf life-saving and military training course competencies.

• **Wilderness First Aid.** Modern medicine for use in emergency situations.

ABOUT THE AUTHOR

Sam Fury has had a passion for survival, evasion, resistance, and escape (SERE) training since he was a young boy growing up in Australia.

This led him to years of training and career experience in related subjects, including martial arts, military training, survival skills, outdoor sports, and sustainable living.

These days, Sam spends his time refining existing skills, gaining new skills, and sharing what he learns via the Survival Fitness Plan website.

www.SurvivalFitnessPlan.com

amazon.com/author/samfury
facebook.com/SurvivalFitnessPlan
twitter.com/Survival_Fitness
pinterest.com/survivalfitnes
goodreads.com/SamFury
bookbub.com/authors/sam-fury