An Introduction to

Dynamic Backyard Cutting

By

Red Michael

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WARNING

Sword handling and the practice of martial arts can be dangerous. Serious injury or death may result from the careless or irresponsible handling of bladed weapons. The author does not accept any liability or responsibility for injuries, damages, or deaths resulting from the instructions in this work. In fact, he’s never even heard of backyard cutting. Sword? What’s a sword? Shut up. Handle weapons at your own risk. Only competent, rational, sober, morally-upright adults with good credit should handle live blades. Seriously, if you are an unsupervised minor, DO NOT handle a sword. Get someone to hold your hand first. Consider progressing gradually from whiffle bats to real weapons. Consult your physician before beginning any training regimen or exercise program. Keep a bucket of ice and a tourniquet on hand when training with sharp blades. Donations can be directed to a charity of your choice. Don't litter.

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I will find you.
In a Nutshell

Dynamic Backyard Cutting is the practice of stringing up water-filled plastic bottles or other targets and going medieval on them with a sword, machete, or other contact weapon. It’s an entertaining and very cheap way to practice striking techniques, footwork, and other aspects of weapon-based martial arts. Dynamic cutting is to swords as casual target practice is to firearms. I want you to join in the fun. Sharing action-packed videos of your weapons is a great way to help others decide which sword or other blade they’d like to buy... and channel your creativity!

Introduction

Welcome, friend. I’m Red Michael. You might know me from my YouTube channel, where I like to demonstrate inexpensive swords, machetes, and other brutal weapons. I’m one of many niche hobbyists who enjoy collection functional swords and other edged or blunt tools.

As a blade enthusiast, I’ve benefitted greatly from the information and demonstrations left by other collectors before me. The most helpful resource ever devised for people like me was the Sword Buyer’s Guide website, without which I never would have known what to look for in a functional blade or where to find them. I participate occasionally on the Sword Buyer’s Guide forum.
A common feature of many sword reviews on the SBG or on other forums is the inclusion of test-cutting footage. Water-filled plastic bottles or paper cartons are the most common medium, and they’re usually placed atop a pedestal-like cutting stand. My first test cuts followed this procedure.

I’d like to introduce you to a different method of backyard cutting, which I’ve found to be both an engrossing hobby and a fun method of sword training: dynamic backyard cutting! First, though, we’ll take a look at the history of backyard cutting.

A History of Backyard Cutting

The hobby of sword collecting has experienced massive growth since the turn of the 21st century. While still a niche interest, it is now easier and less expensive than ever to obtain an inexpensive, functional blade. A plethora of online reviewers on YouTube, sword-related forums, and Facebook groups have even made the process of finding the right model fairly painless for the new collector.

You want a REAL SWORD? No problem. While antiques are out there for sale, most of us prefer affordable and functional replicas of yesteryear’s blades. Swords may be close replicas of historical models, creations of high fantasy, or stripped-down and modernized tools. They can cost anywhere from less than fifty to as much as many thousands of dollars.
Precision, fit and finish, historical accuracy, and materials quality vary widely. Broadly speaking, a sword can be considered “real” if made from some grade of high carbon steel, given a proper heat treatment, and constructed sturdily enough to withstand reasonable impacts.

Just about every enthusiast who gets their hands on a functional sword feels an overwhelming urge to cut something with it. It’s only natural. They’re tools, and while they do great as conversation pieces or mantle displays, their primary function remains unchanged: to pierce and cut. Owning a sword and not cutting with it is much the same as owning a rifle and not taking it to the firing range. What’s the point? You might as well get one made entirely of wood if it’s just going to sit there¹.

The Japanese Sword Arts include a practice called tameshigiri, which simply means “test cut”². Now, I’m told that tameshigiri was not originally a hobby or a method of evaluating one’s swordplay. It was more of a proof test intended to prove that particular sword’s inherent cutting ability and quality. For this reason, only the most skilled swordsmen participated in tameshigiri (to eliminate variables).

Tameshigiri involved organic materials like bamboo, rice mats, and oh, right... the bodies of condemned prisoners. While undoubtedly it was scientific as all hell, it eventually became taboo to cut people up as part of tameshigiri³. The practice of test cutting also became more about developing or proving one’s skills rather than proving the blade’s worth,
particularly in today’s world of mass-produced swords. Katana-wielders settled on tatami omote mats as the ideal solution for their training. The tatami mats were rolled into bundles, soaked in water and placed on (usually) stationary vertical stands. The mats are said to approximate the density of human flesh. A swordsman would attempt to execute multiple cuts on the same mat, or cut multiple mats as part of the same sequence.

The trend of backyard cutting seems to have risen with the ready availability of functional swords on the internet. The first practitioners were no doubt students or teachers of the Japanese Sword Arts who posted videos of themselves cutting tatami mats in their backyards rather than a dojo. Collectors and hobbyists unaffiliated with Japanese sword schools must have then followed suit. European swords (and others) began to be tested against tatami mats as well.

The problem with tatami is that it’s pretty expensive and hard to find in most places. A cheap alternative was found in the form of milk jugs, water bottles, and other malleable recyclables refilled with water. These targets were essentially free, didn’t tend to damage blades, and provided fun instant feedback. Other materials like foam pool noodles or rolls of newspaper are also in use, but nothing has caught on quite like water bottles and milk jugs.

It’s now common to see videos of sword or machete owners testing their pieces on water-filled receptacles set on top of cutting stands, trash cans, or other similar pedestals. I joined in the fun after purchasing my first functional sword, a Windlass Qama.
**Dynamic Cutting**

I lived in Brazil for a couple of years after high school. Starved of contact with swords, I eventually found an interesting machete for myself and decided one day to try my hand at test-cutting once again. Lacking a target stand, I ended up suspending a two liter soda bottle from a clothesline. I was very gratified by the results of that experiment, and before long I was collecting as many empty bottles as I could and stringing them along the zigzagging clothesline of my courtyard. I would move and cut my way through each of the targets, trying to improve speed, accuracy, fluidity, and the cleanliness of the cuts. Since then I’ve been guided by two basic principles in my cutting practice. First, that a very cheap blade (even a machete!) can be a great little cutter. Second, I learned that multiple suspended targets are MUCH more fun than a single lonesome bottle sitting on a stand!

We’ll call this method of cutting multiple suspended targets “dynamic cutting”. Dynamic cutting involves stringing up multiple water-filled soft targets (plastic bottles, jugs, paper cartons, aluminum cans, etc.) and cutting them in sequence. Dynamic cutting is intended to be executed with whatever stance and form you would consider appropriate for combative purposes, according to your sword studies. Good dynamic cutting will incorporate footwork and proper follow-through with each cut.
Dynamic cutting is better, in my opinion, than the typical backyard cutting method of placing a single target on a stand. Suspending bottles from an overhead rack gives you huge leeway to change the target’s height, representing strikes to any part of an opponent’s body. When stringing up multiple targets, you never have to use the same setup twice! The target may be cut from any angle without fear of striking the cutting stand itself. Multiple targets can be strung up in such a way that you can cut and move through the area without, once again, getting hung up on the target stands. Targets suspended on strings can also be cut while they are swinging back and forth.
One possible downside to cutting suspended bottles as opposed to using a stand is that you can only cut the bottle once before the water drains out. Therefore, each bottle can only give you two clean cuts... one on the bottle itself and the other to sever the string holding the neck of the bottle. With a cutting stand, you can “pickle” the target, or try to cut small slices of it off. Still, I feel the benefits of dynamic cutting far outweigh this loss. Unconvinced? Fine, you can have both.

Together with pell work, drills, and sparring, I feel that dynamic cutting should form a part of every swordsman’s wholesome breakfast training regimen. It familiarizes you with the handling of a sharp blade, lets you observe and fix your edge alignment, and lets you see if you can keep clean technique under a little bit of performance anxiety.

Say you’re a prepper who has a couple of edged weapons as backup pieces to your guns. Would you carry a pistol if you’d never actually fired it at a target? It’s the same with that machete, tomahawk, or knife. Do some dynamic cutting. Get comfortable drawing the weapon, moving with it, and cutting multiple targets. If not, you might as well leave that blade in your closet when SHTF.
Alright, so maybe you spend a bit of time in the dojo-cademia maintaining thine ancient-ish traditions of swordplay. You’re not convinced that jumping around in the backyard hacking at water bottles will make someone a skilled swordsman. I believe that good backyard cutting does make one more competent at moving and cutting with an edged weapon, but we won’t even get into that. You want a good reason? The overarching purpose of dynamic cutting is... for fun!

I cut things for cutting’s sake, not because I expect to be woken up in the middle of the night and have to smite with the sword. It’s a fun hobby, much like target practice with a bow or gun. When I’m looking at a weapon I want to buy, I think mostly about how fun it’ll be to cut with, not how historically accurate it may be or how it’ll look on the wall (not that those are bad considerations). I would rather own ten cheap sword-like machetes than one very nice sword, because I enjoy experiencing the differences in handling between different designs in my dynamic cutting.

I call it dynamic cutting, but it’s much more than just the cuts! Thrusting, stabbing, smashing, pushing, punching, and bashing all come into play. Practice your thrusts, your pommel smashes, your handguard punches, your live hand checking, your secondary weapon attacks, and hell, even your roundhouse kicks on those suspended bottles. Get creative. Hanging bottles make great targets for axes, hammers, maces, batons, staffs, and spears, not just swords and machetes. I even throw my knives, tomahawks, and other blades at them sometimes as a test of combat accuracy.
**Weapons**

Any weapon or tool fit for harsh impacts will withstand dynamic cutting just fine. This can be a sword, machete, knife, club, axe, hatchet, tomahawk, billhook, sickle, spear, halberd, dagger, expandable baton, baseball bat, crowbar, cleaver, or just about anything you can imagine! Swords, of course, are the most commonly-used and intrinsically pleasing instrument for the purpose.

Be sure that your weapon is “battle ready”. If it’s a sword, be sure that the tang is constructed sturdily and that the blade is made of carbon steel with a proper temper. A snapped-off sword blade flying through the air can end in a lethal accident. If using a katana, please be sure that the meguki, or tang pins, are in good condition and made of the right materials. Me personally, I wouldn’t trust a sword with a single bamboo peg holding the tang in place, but then again I’m a filthy heretic. If you are (foolishly) using a battle axe that relies on a wedge to keep the head in place, be sure that it’s sturdy and well-seated.

Before beginning a cutting session, make sure that your weapon is in good condition. Be sure that the grip of your weapon will not slip out of your hand if it gets wet and slick. Water will probably be splashing all around you once you start bashing bottles. Be sure that no part of your weapon rattles.

I don’t recommend using a cheap folding knife for this kind of test-cutting. Back in Brazil I had a cheap switchblade jam open during a slash against a bottle, folding back over the liner lock. The blade started closing towards my fingers, although fortunately friction stopped it before anything bad could happen. While I personally trust more robust folders
(like my Cold Steel Spartan) to perform safely under stress, it may be best to leave this kind of cutting to fixed blade knives.

Thinner, lighter, and sharper swords do better with the targets we’re talking here. Some swords with heavier and thicker blades or a steeper edge bevel will have trouble cutting cleanly through a bottle. This doesn’t mean that they’d be ineffective against flesh, bone, and light armor. A thin and whippy machete blade does better against soda bottles than a Viking axe, but that doesn’t necessarily correlate to wounding potential. On the other hand, the problem might be you. Is your sword simply knocking plastic bottles and soda cans around? It may be too dull. If it’s already sharp enough to slice a sheet of paper, the problem is probably your edge alignment. Rarely do novice cutters lack raw power. Keep practicing with easier targets, like milk jugs and 2 liter bottles. The results will show you how cleanly you’re cutting. Is your blade twisting or veering off course in the middle of the cut? Is your edge alignment correct? If appropriate, are you incorporating a drawing/pulling/sliding motion into the cut?

**Targets**

As I said, empty recyclables are the target of choice. From the easiest to the most difficult to cut, here are some common choices:

**HDPE Milk Jugs**
The high-density polyethylene plastic used to make milk jugs is very easy to cut. These are also very rewarding targets to stab at, especially for a weapon with a less acute tip. While not challenging to cut, it’s great fun to send an entire gallon of water rushing to the ground with a single swipe. I usually like to stab them once or twice before the fatal cut.

16.9 oz disposable water bottles

I use these the most, simply because I always have some on hand! They’re not challenging to cut, but are fairly small and require some accuracy. The labels are easy to remove, too. I usually reuse these after drinking, but you can buy an entire case of new ones for less than $3 in most places if you want to skip the refilling stage.

Bleach/Detergent Bottles

The plastic in these is more malleable than a soda bottle, just like the milk jugs. They’re great targets for a thrown knife!

2-Liter Soda Bottles

These require a little more attention to edge alignment and a slightly sharper blade than the milk jugs. You’ll be able to tell if you’re cutting cleanly or if you’re tearing a ragged or crooked path through the bottle. Again, it’s very fun to dump all that water at once!

12 oz. Soda Cans

Some of you might cringe at the thought of scraping your nice sword all the way through an aluminum can. I haven’t seen any scratches or edge damage on my blades from it yet. Still, you might want to save the cans for machetes, axes, or other such weapons if you’re concerned with that. A good blow with a sharp blade will cleave cleanly through a soda can. It makes a very cool sound to boot.
20 oz. Soda Bottles

You'll need to pay a little more attention with these ones. Good edge alignment, a sharp blade, and enough velocity are all required to cut ‘em clean. An off-center thrust might skip harmlessly off the side of the bottle.

Gatorade/Sports Drink Bottles

The plastic is a little thicker, so these are more challenging yet. Cutting them cleanly usually requires a light and fast sword with good edge alignment. Piercing them with a tomahawk spike or knife tip is a great exercise!

There are many other potential options ranging from paper cartons to kitty litter jugs, but these are my mainstays. Anything malleable enough to cut that can be strung up can be a target. Get creative!

Cutting Racks

Suspended targets require a rack of some sort. Me personally, I cut out in the woods. I’ve thrown some really long tree limbs up over a trail and use those to hang my bottles. You’re probably limited to a backyard. You’ll have to figure out the best solution to the problem, but here are some simple ideas:
String a line between two trees – Well, any two structures will do. Poles, buildings, etc.

Build an overhead rack out of PVC pipe – This really isn’t as expensive as you might think. Maybe $30 for an economy model that’ll provide HOURS OF FUN.

Hang bottles from the rafters of a porch!

Hang bottles from playground equipment!

Just string them up in a tree!

The world is your oyster. Just find a way, will you? I guarantee it’s that much more fun than a cutting pedestal. Don’t get the cops called on you.

Try to get a minimum height of eight feet or so for the rack – more if you’re freakishly tall or plan on using overhead strikes with a long weapon. It’s up to you. A taller rack gives you more strike clearance, but it’ll be a little more awkward to actually get the bottles strung up. I’m just saying, though... it would be really embarrassing if you tried an oberhau with that longsword and ended up severing the line you strung between two trees, dropping all your bottles to the ground. Make it high enough.

My personal preference is to have at least two lines or poles facing different directions. That way, you get a more three-dimensional experience. A grid-like or zig-zag overhead rack is the best, as you can move forward and engage targets on either side.

If you’re using a flexible line as your overhead rack, consider putting in a knot every foot or so. This will help keep the weight of the bottles from making everything sag into the middle of the line.
Once you’ve got an overhead line/pole/pipe/branch to suspend things from, just get some twine or string, tie it around the mouth of the bottle and toss it over. Tie a simple loop again to affix it securely to the rack. Soda cans could be tied off through the tab on the mouth. Milk jugs have a handle. Paper cartons could have a hole poked through the top in order to hang them as well. Figure it out!

After cutting the bottle, you can loosen the noose around the bottle’s neck slightly and put another target in. If you end up cutting the string or twine holding the bottle, you can use a square knot to splice it with a new piece and make it long enough to use again. You can experiment however you want, but I do recommend sticking with something easily cut and inexpensive that won’t damage your sword. No steel wire, for example.

**Safety**

Before I go any further I’m kind of obligated to remind you that swords, like any other sharp instrument, are very dangerous. Always handle them with care. Be aware that your blade is a sick puppy who’s constantly hoping you’ll make a careless mistake so that it can bathe in your blood. It doesn’t love you¹. Never swing a sword (even a little) unless all bystanders are at least 7 yards away in all directions. This buffer zone will help reduce the chance of someone getting hurt if your sword breaks or slips from your hands. This isn’t a theoretical problem. People have died or been hospitalized when swords have come apart during use (that’s what you get when your tang is held by a bamboo peg, I guess). Don’t swing a sword around your pets. Put them in the house so they don’t wander on set when you least expect it.

I guess what I’m saying is...

**BE SMART.**

If you’re incapable of that, there’s nothing I can do to prevent whatever great misfortune awaits you. And remember, you’re just as likely (or MORE so) to accidentally kill or injure your dog, mother, girlfriend, wife, neighbor, or little brother as you are to hurt yourself. Think about that before you start swinging. Blades require just as much attention to safety as firearms. Keep a trauma kit (bandages, tourniquet) and a phone on hand in case you accidentally sever something you shouldn’t and need medical attention.
Principles of Cutting

You need to have some idea of how to use a weapon properly before you go flailing about at water bottles. The best solution is to find an instructor and learn some weapon-based martial art. It can be HEMA, Escrima/Arnis/Kali, a Japanese sword school, Haitian machete fighting, Chinese swordsmanship, or whatever else you find in your area.

The next-best thing is to watch somebody else’s video of proper sword use and copy them. There are various instructional DVDs available that can teach you plenty for the purpose of good dynamic cutting. Watch some YouTube videos of guys who look halfway competent and do what you can with that. If, in the end, you’re just some bloke with a machete who wants some basic pointers about how to move and cut well, come to my channel or forum and we’ll help you out.

You don’t need some fencing Ronin-knight Jedi pirate captain master on hand to give you lessons in order to learn enough to move and cut effectively. I’m not talking about becoming a skilled sword fighter, per se, just about learning to do some good, clean, and safe dynamic cutting in your backyard. It’s much the same as the difference between just getting some good trigger time at the firing range and gearing up to go busting down doors with the SWAT team. The first doesn’t imply the second.
Analyzing your Technique

An important part of dynamic cutting is going through a shot-by-shot replay of your cutting sequences in order to analyze your technique\textsuperscript{16}. With video, you can compare what happened in your head to reality and see how closely you really stuck to good technique. You can compare your cutting footage to more experienced swordsmen or teachers and make the necessary adjustments next time. Figure out how you can improve body mechanics, follow through, or footwork by watching yourself. Don’t outpace your own abilities. Cut with the techniques you’ve practiced in the air, on pells, or with a partner.

This is very important: every strike you throw should have a pre-determined path of motion with distinct starting and stopping points. Think about what you’re going to do before you do it. Do not wave a sword or any other weapon wildly around without considering where it’s going and what it might hit.

I highly recommend the use of a tripod and a decent digital camera. The shakiness or low resolution/frame rate of the phone in your friend’s hand won’t be very helpful. I got my camera (refurbished) and tripod pretty cheap on Amazon.
Creative Expression

Alright, so you’ve had a decent cutting session. You’d like to stick the footage up on YouTube and maybe link it in a thread or two for the sword-collecting community to see. Nothing wrong with that! We like seeing different weapons in action. It’s fun to see yourself in action. Everyone’s a winner.

STOP. I know your intentions are good. Thing is, good dynamic cutting is only the first half of a good cutting video. Before you slap that clip up, increase its watchability tenfold with good editing.

Seriously, nobody wants to watch for thirty seconds as you tidy up your workspace and set up a bottle. Cut that part out. Nobody wants to see the same thing between your cuts. Cut all that out. Nobody wants to see your fails (okay, maybe sometimes, for the chuckles). Cut most of that out. You know what’s interesting? Pure cutting. That might mean that you end up with only thirty seconds of footage after a good cutting session. That’s just fine. We’re far more likely to watch your video, and then maybe watch it again if you make it non-stop action with no foreplay.

Make it fun to watch. Throw a little slow-motion in there. Film from various angles. Set it to music! I love turning my cutting into little music videos for my reviews. It’s so much more interesting. Express yourself. It really isn’t that hard to throw your cutting clips into Windows Movie Maker and fiddle around for a while until you’ve got an entertaining video. Maybe throw some costumes in there. Me personally, I like to put some food coloring into the water bottles. It makes the cuts so much more visually striking on camera. It’s ART, dammit!

As a bonus, spending time watching and re-watching your cuts during the editing process will give you some seriously detailed insight into how your cutting technique went and how you can improve next time.

Let’s make this a movement. I want you to go do some dynamic cutting. Film it, edit it into something awesome, and slap it up for us to see. We’ll have some fun with this. Dynamic cutting videos could be filling up our playlists real quick. Hell, let’s have monthly competitions for the best cutting montages. Post ’em on the SBG forum or on http://www.modernswordtactics.freeforums.net and we’ll cheer each other on. I’m waiting.
Footnotes

1. I'm looking at YOU, Collector McDustyboring!
2. In translation, most names for foreign things aren't really as creative as they first seem.
3. Everyone had a momentary lapse of memory about that during the WWII.
4. Mostly this was done for good, academic fun, but we all know there was a chip to be knocked off someone's shoulder. European swords weren't getting no respect. "What did you say? No... you don't get to say that. You don't GET IT, man! It's only okay when one of us says broadsword! You don't even know what that is, not REALLY! Stick to your own kind!"
5. You don't enjoy a good splash in the face?
6. Nothing says "Mom pays all the rent" quite like cutting from the top of a plastic trash bin.
7. We knocked on all the doors, we drank all the guarana. It was a good time.
8. I also quickly became notorious throughout the mission as “That guy with all the machetes in his suitcase”.
10. Survey says you don't really have any. Prove me wrong.
11. AND a pork-eating Crusader.
12. I let another guy take a swing at one of those clothesline-bottles in Brazil once with a machete. He wound up like it was a baseball bat, smashed the bottle aside with terrible edge alignment and kept going to knock a chip of concrete out of the wall. I was not amused. The bottle was slightly torn about the whole thing.
13. In fact, nobody loves you.
14. Monkey see, monkey do. It's not that hard, you damned dirty ape!
15. No, I'm not a fricking expert. I'd be charging for this bosta if I were.
16. Try not to cringe too much.
17. If I put down some butcher paper before the cutting session, I could make sweet watercolor abstracts.