

All About Ketties

A guide to modern slingshot shooting in South Africa



Compiled by: Dirk Lucas
July 2026

Ketties

A little about me. I have been busy with ketties for a good few years now, after last cutting forks as a child and slicing up bicycle tubes for bands. We started a very enjoyable kettie club here in the Cape. (Boksom Bende Kettieklub, or just BBK) There is still something new to learn every day and nuances to experiment with. When I started, the information needed to understand kettie shooting was very scattered, and YouTube videos and experimentation were the only way to learn. It took a long time to pull all the threads together. I put this document together to separate the wheat from the chaff and to make it easier to understand everything that is involved, or at least to give you a starting point on your journey of discovery in kettie shooting.

Your first question is most likely: Which kettie should I get?

Not so fast. You first need to understand a few things.

Kettie shooting is a sport now. International tournaments are held every year, with countries from all over the world taking part. China has the largest number of shooters, so it is not surprising that much of the equipment, bands and innovation in kettie shooting comes from them. Here at home it is still fresh as a sport, so we are at the forefront of what is happening.

Shooting a kettie accurately is not easy. I have heard quite a few people who have taken part in many other shooting-type sports say that kettie shooting is the most difficult. The reason is that there are so many variables. The trick is therefore to eliminate as many of the variables as possible, or turn them into fixed habits, so that you can concentrate purely on the shooting.

So let us first talk about the variables in kettie shooting before we get to the ketties themselves. I mention everything here because these are all elements that have an influence, and each one will take its own journey of discovery to find out what you like most and what will work best for you. There is no instant answer for any of them.

- Bands (latex used for shooting): type, thickness, length, taper.
- Pouch (velletjie)
- Kettie frame shape
- Fork width of the kettie
- Anchor point
- Holding and releasing the ammunition (Release)

Other things discussed

- Equipment
- Ammunition
- Buying a kettie
- Which hand do you shoot with
- General advice
- Ethics
- Safety

Bands

Since the days when we shot with haasrek and strips of old inner tubes, rubber technology has changed a great deal. The bands we mostly use now are thin flat latex rolls that are mostly (or exclusively) manufactured in China (flat bands). They are in the order of 0.4mm to 1mm thick and are made specifically for kettie shooting. These bands are phenomenal, and the new versions can stretch at a ratio of 1:6.7. That means 1cm can stretch to 6.7cm! Tyre tubes or haasrek cannot do that.

In general we use bands of 0.45 to 0.6mm. 0.45 or 0.5mm is best for the 8mm steel ammunition or clay that we shoot at club and competition level, or practise with at home. Thicker than 0.5mm is meant for bigger ammunition and, oh dear, for hunting too. For something like marbles or 10mm steel ammunition, 0.6 or 0.7mm is better suited.

Just something about tubes (I have never been able to think of a good Afrikaans word for them). These are usually the beige medical latex tubes, and about the only halfway shootable bands that were commonly available to buy in South Africa until recently. But once again the Chinese have taken this to the next level, and there are now quite a few variants and thicknesses available that are light years better than the medical latex tubes and made specifically for ketties. If it is something you want to experiment with, they are quite fun to shoot and they last forever! The flat bands are, however, so much better for accurate shooting and have considerably more oomph, so I will keep the information to the flat bands.

There are quite a few brands and suppliers of these flat bands. In South Africa there are now a few people importing these bands. On the Chinese shopping platforms such as Temu you can get variants cheaply, but they are generally of doubtful quality. You can also buy bands directly from places like Precise or GZKBands. Delivery is good but somewhat expensive if you do not buy a whole lot at once. Support the local guys bringing in the bands and equipment. Cheaper and faster.

Recommendation: Precise's 0.45 or 0.5mm in most variants is very good.

There is equipment available that makes cutting and attaching this type of band much easier, which I will cover later.

Taper and length of the bands

Let me explain taper first. The flat bands are cut with one end narrower than the other. The narrow end is attached at the pouch side and the wider end to the frame. There is enough physical and



scientific evidence that this makes a real difference. The explanation is that the narrower section contracts faster than the wider section, which has the effect of accelerating the ammunition to a greater speed than when the band contracts at one speed throughout. The slight downside is that this type of cut reduces the lifespan of the bands. The advantage of ease of shooting and better speed more than makes up for any disadvantage.

Length

To determine the length of your bands there are one or two more concepts that are important for understanding the bands better. There is a horde of YouTube videos covering this as well.

The speed at which the ammunition travels has an influence. In general, the faster it is the more accurate you will be, but there is also a point where it can become detrimental. So the trick is to find a good middle ground between ease of shooting, speed, and the lifespan of the bands. There is a lot of debate about this, and some believe the bands should be “maxed”. In other words, that you draw them to the point where they cannot stretch any further. As mentioned before, that is up to 6.7 times the length of the band for the new bands. Personally I think that is nonsense, because you will damage the bands quickly and have to put considerably more force into the draw without getting any benefit from it. The idea is to hit the target, not to kill it. As long as you can shoot flat over 10m, you are set.

Around 80% of the band's capacity is a good point to be at. Above that, the bands will not last as long, and the extra force you need to put into the draw will not be carried over into the shot.

So how do you work it out?

Determine your draw length. This is the distance between your anchor point and the frame where the bands attach. To measure it, use a piece of string or a tape measure and hold it as if you are about to shoot. One end against your cheekbone or whichever other anchor point you use, and the other end in your front hand where the frame will be. That is your draw length. Say it is 83cm (mine) for the sake of the calculation.

The vast majority of the bands you can buy stretch to about 6 times their length, so I will stick with 6 for the calculation.

80% of band capacity: $6 \times 80\% = 4.8$

Band length therefore: $83\text{cm} / 4.8 = 17.29\text{cm}$ (17.5cm rounded off)

Add 2 or 3cm for attachment on both ends. (Depending on the attachment method. Ketties with clips need less.)

Cut length of the bands therefore: $17.5\text{cm} + 2\text{cm} = 19.5\text{cm}$.

I cut my bands 20cm for my draw length of 83cm and then rather use 1.5cm for attaching to the pouch, for convenience. That gives me 17.5 cm of active length, which is comfortable for me to shoot, still shoots flat, and the bands last a bit longer too.

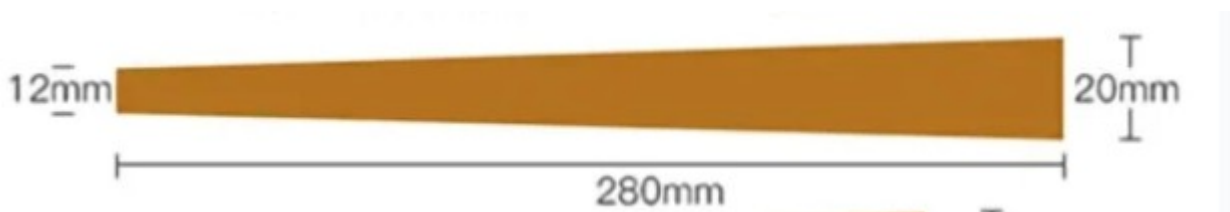
Taper

Once again there are plenty of debates and MANY YouTube videos and forum discussions about this, and every time we get together it is one of the things that gets talked about.

A good starting point is a ratio of 3:2 or even 2:1.

For 0.5mm bands shooting 8mm steel, 22:12 is a good starting point. (Narrow end 12mm and wide end 22mm)

If you are going to shoot thicker bands with 8mm steel, you can adjust the taper quite a bit and make it narrower.



Naturally there are endless possibilities here, which makes for enjoyable experimenting.

My current bands of choice are 0.45 new-generation bands (6.7x), which I simply cut in a 20/10 taper. They are very light to draw, last long enough, and have more than enough speed to shoot with comfortably.

Pouches (velletjies)

This is the little thing that holds the ammunition while you shoot. The Americans call it a pouch in the YouTube videos, and if you want to buy one, that is the term that is used. In our kettie tradition it is a velletjie (a little piece of hide), and I love that word because it is what generations made ketties with. For the rest of this guide, though, I will stick to pouch.

Oh yes, the pouch goes on the narrow end of the taper of the bands.

The pouch is actually more important than you might initially think. The release of the ammunition is one of the most important elements of shooting a kettie properly, and the pouch has a direct influence on it. More about the release later. Even the weight of the pouch has an influence on the speed of the shot. Keep in mind that the 8mm steel balls weigh only 2.1g, so if you put a big piece of leather on the ends of the bands, it will weigh as much as or more than the ammunition. The bands then have to struggle to move that big piece of leather as well in order to get the ammunition moving forward.

There are quite a few different pouches on the market, mostly made of synthetic material. Or you can cut your own from leather.

The general principle is to make it as light and comfortable as possible, so that you grip on top of the ammunition and not around it. Any of the experienced kettie guys will gladly show you examples and hand some out.

Kettie shape.

There are two types of ketties: OTT and TTF.

OTT = Over The Top.

Most of us shoot with the method where the bands are tied or clamped over the top of the fork, shooting the ammunition over the top of the frame.



TTF = Through the Fork.

This is more in line with how we used to make ketties: the bands are attached against the sides of the fork, which then shoots the ammunition through the frame.



As mentioned, OTT is the more common way, and you can experiment with what works best for you. In terms of shooting variables, the influence lies in the way you aim. OTT's advantage is that you have a very clear aiming point at the tip of the band. It is also easier to line the bands up on top of each other.

With TTF your aiming point is the middle of the top band, and you cannot see the bottom band while aiming either. TTF is actually great fun to shoot as well, and worth trying out if you get the chance.

Shooting Style

I should also first explain shooting style and its influence on the variables. For everything I mentioned above, practically all of us shoot “gangster” style, where the kettie's forks are held vertically, one above the other. This is quite contrary to how most of us were used to shooting, and there is an enormous advantage in it.

The reason for this is to remove one big variable. If you shoot upright, you have to aim in three dimensions: the vertical axis, the horizontal, and distance. With gangster style shooting you directly remove the vertical variable, because you are vertically perfectly aligned when you hold the bands one above the other and draw a line to the target. That leaves only the horizontal axis to worry about. One variable fewer.

Another big advantage of gangster style shooting is that you have a definite, specific aiming point at the tip of the upper fork. Many of the bought ketties also have some or other aiming mechanism specifically for this. With the traditional upright (horizontal orientation) shooting method you need a virtual point somewhere between the forks, or you do not aim at all and just shoot by feel. This principle of aiming is a fundamental change for being able to shoot accurately.



Fork width and anchor point

The relationship between the width of your fork and where you anchor is something to understand properly, because it determines the height of your shot.

A smaller frame will require a higher anchor point, and with a wider frame you will have to anchor lower.

These two concepts go hand in hand, and the one has a direct influence on the other.

To define them:

Fork width is the width of your frame at the top, from tip to tip. For beginners, most ketties between 90 and 100mm are the best to start with.

Anchor point:

This is another of the important variables for accurate shooting, and for me personally one of the hardest to get right, and the one that can perhaps hold you back the most when you start shooting. Without a repeatable, specific anchor point you will struggle to shoot consistently the same.

Your anchor point must be a spot you draw the bands to that can be repeated every time. It can be on your cheekbone, the corner of your mouth, your ear, or even your back foot like the guys who shoot butterfly! Or even on top of your head, the way some of the Spaniards shoot. A good place to start is to hold the knuckle of your thumb under or against the spot where you can feel your cheekbone. For a 90mm fork-width kettie, your cheekbone is a good starting point. You will quickly see whether you need to adjust.

Remember, with gangster style shooting we eliminated the vertical variable. With these two you address the horizontal variable. Now you can start getting accuracy!

So to sum up: if your bands are set up to shoot reasonably flat, your anchor point is right for the kettie you are shooting with, and your release is right, you WILL start hitting stuff you aim at.

Release

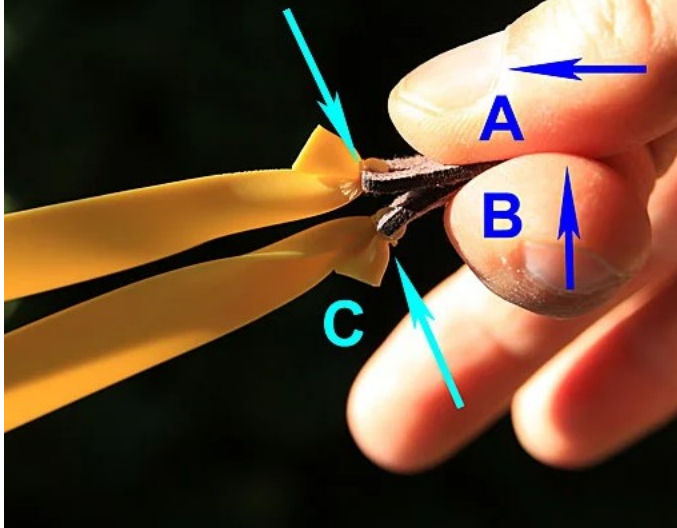
The last big variable is the shot itself, or the release. A bad release can be very dangerous, and you can do real damage to yourself, the kettie, or other people or things around you. And most importantly, you will miss!

Here are the rules:

1. The kettie in your front hand must stay stable until the shot is complete. So do not “throw” it.
2. Grip on top of the ammunition, not around it.
3. Hold your pouch arm at 90 degrees so that your hand is straight and does not “flip” the ammunition.
4. Before you draw, check that the tips of the pouch are perfectly on top of each other, so that one band will not be drawn longer or shorter than the other.

Pouch release technique - check:

Thumb tip (A) placed over second index finger joint (B), pouch tips aligned (C), pouch aligned relative to bands or tubes, depending on shooting style, no twisting.



So what kettie should I get?

So now that you have an idea of what is involved, we can return to the “what kettie” question.

If you look at the variables I have mentioned here, it will not matter which frame you get. A natural wooden fork (a natty) that you cut from a tree will work just as well as a store bought kettie, or you can buy an expensive custom-made kettie, or make one yourself.

All I can say for certain is that you will end up getting and trying different ones.

Decent ketties that you buy are not cheap, but the most expensive kettie and all the equipment you will need are together cheaper than a single golf club, or even a round of golf, or a good pair of running shoes or a tennis racquet. So the sport is accessible and not at all expensive as far as sports go.

If you are going to buy one, there are many ketties on the market. These days the cheaper Chinese ketties or the more professional ketties from other parts of the world are far more available in South Africa, and there are many of reasonably good quality. Things to look out for: do not buy the ultra-cheapies. Look at the material it is made of and, most importantly, look at the fork width! If it is not even listed, walk on by. You can also buy ketties that are adjustable, which will allow you to experiment with different fork widths.

Ammunition

Definitely not stones! With the fast bands, that is a recipe for disaster.

Steel balls (ball bearings) are the usual ammunition to use, and 8mm is generally used in competitions. The weight is 2.1g. People who hunt sometimes use bigger steel or lead balls. But for our purposes in the sport, 8mm is perfect and the standard. And the biggest advantage is that it is magnetic. You can put a magnet on a stick, and you do not have to crawl around on the ground to pick them up.

Clay balls are very good to start with. Especially if the safety of the area where you shoot, your experience, or your kettie or bands is at all a consideration. They simply disintegrate when you hit something hard, but do not underestimate them. You can still shoot through a cold drink can with them. Clay balls are generally about 9mm and weigh about 1g. So they are less than half the weight of 8mm steel and need a much lighter band to shoot with. Because they are so much lighter, accuracy with clay is not as good as with 8mm steel.

Which hand do you shoot with?

There is also great debate about this question, but in general it comes down to your dominant eye. For most people, if they are right-handed, their right eye is dominant. That means you hold the frame in your left hand and aim with your right (dominant) eye. That is also my situation: I am right-handed and right-eye dominant. But I shoot the other way around. I aim with my left eye, and my right hand holds the kettie. For me there are two reasons. An old injury to my right arm makes it difficult to draw the bands, and for me it was simply natural to hold the kettie in my right hand. There are, however, surprisingly many people I have met through kettie shooting who shoot “the wrong way around” like this. At the moment 40% of our club members shoot “the wrong way around”. Then there are the cases where people are “cross dominant”, in other words, their left eye is dominant but they are right-handed. Or where you have no dominant eye and can shoot with both eyes.

My personal opinion is that your non-dominant eye is perfectly capable of drawing a straight line to the target, and that you should shoot in the way that is most comfortable for you and works best. There are a few good YouTube videos that show how to determine your dominant eye.

So once again: the general rule is that you shoot with your dominant eye.

Holding the kettie.

This is something you usually do naturally, but there are terms for it, so I would just like to mention them.

There are three ways to hold the kettie:

- “Thumb brace” or “Brace grip”



- “Pinch grip”



- “Hammer grip”



The style of the kettie will usually determine how you hold it. Some of the bought ketties will allow you to use any grip, but in general each frame or kettie will be made for a specific way of holding, or its shape simply lends itself to being held in a certain way.

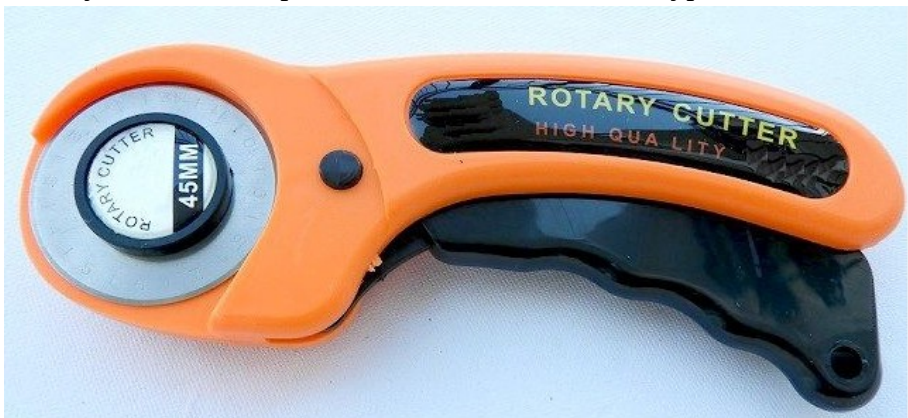
The kettie must sit firmly enough in your hand that it cannot accidentally slip out. If you have a kettie that feels like your grip loosens or weakens when you draw the bands, get a different kettie. It can be very dangerous. Most ketties also have a place to attach a cord or lanyard with which you can keep it secured to your wrist.

You should also not hold the kettie so tightly that it interferes with your shot. Hold it just tight enough that it is stable and still comfortable.

Useful (essential!) equipment

If you do not have the right equipment, the thin bands are practically impossible to cut and attach.

A rotary cutter is indispensable. You cannot cut this type of band with a knife or scissors.



A template helps a great deal for cutting the tapers consistently right. This made the biggest difference for me with this type of band.



A jig is very helpful for attaching the pouches. As in the photo, there are quite a few types available, or you can make your own.



General advice

Shoot into a mirror. Not literally. Stand in front of a mirror and draw as you would shoot (without ammunition). This will allow you to see exactly how you hold the frame and pouch, whether your alignment is right, and how your anchor point compares with where the kettie is actually pointing. Look from the side and from the front. Especially if you cannot figure out why you are shooting left, or everything is going high, the mirror is excellent for seeing what you are doing.

Do your own research and experiment. There are MANY videos on the internet about every aspect I have touched on here.

Shoot at home. Make a catchbox to shoot into for practice. Get clay balls if you are at all worried about the safety of where you shoot. All you need is any 10m area. A catchbox can be as simple as a cardboard box with a few layers of cardboard and cloth at the back, or a better long-term option is to use a cheap plastic crate or box and mount it somewhere.

Shoot at paper. A paper plate or a sheet of paper stapled to a piece of cardboard works perfectly. It will allow you to see with every shot where you are hitting, so that you can make any small adjustments. Try to get a good grouping to make sure your whole setup is right and that you can repeat the same shot over and over.

Fix what needs to be fixed. Don't compensate for errors by shooting differently. If you are shooting left for instance, don't aim to the right of the target to compensate. Try to figure out why you are shooting left. It can be difficult, but it pays dividends over the long term.

There are definitely other ways of shooting than what I explain here, such as "long draw", where you draw the pouch past your anchor point, or "butterfly", where you stretch both arms out fully with longer bands to get unbelievable speed. There is also a PFS (Pickle Fork Shooter), which requires you to shoot over the top of the terribly small kettie being used. In Afrikaans that would probably make it an Agurkie Vurkie Kettie. My advice is to first get the basic principles I explain here under control. Believe me, shooting a PFS takes more than just beginner status.

Safety

Here I want to throw a very big spanner in your works and talk about safety. An accident happens at the speed at which the bands contract.

Ketties are not toys. Think twice about simply buying a kettie for a child and putting it in their hands. These bands are dangerous. There is a massive difference between these bands and the ones we cut from bicycle tubes. These bands are probably about 10 times faster. Some of the kettie manufacturers have an age restriction of 18 to be able to buy a kettie at all. If you give a child a kettie, make sure that safety is maintained at all times and properly supervised. It is similar to giving a child a firearm.

The same goes for adults. Understand what is involved and how dangerous it is. Compare it to using roller skates or a skateboard for the first time and going full speed down the hill without any thought of safety and what could happen. You will end up with broken knees and hands, or worse.

Until then, and after that too, wear safety glasses. Shoot with less dangerous ammunition until you are sure you have the basic principles under control and your release is good. Clay balls are less harmful and simply disintegrate when they hit something. Steel comes back.

A hand full of bruises, or a bloody stripe where you shot yourself, can still heal. You cannot replace an eye.

Things that can go wrong and how to fix them

“Hand slap”

This is when the bands hit your hand quite painfully after you have released the shot. The reason is that your bands are too strong for the ammunition you are shooting. Use thinner bands or slightly longer bands to get past this. Or wear a glove if you insist on sticking with bands that are too strong! This only happens if your kettie is set up OTT style. With OTT the bands run over the top of the kettie, and if a lot of energy is left in the bands after they have sent the ammunition on its way, they come arcing back over the top of the kettie and hit your hand quite painfully. This is not the case with TTF, because the bands do not run over the top of the kettie but go straight through the fork.

“Fork hit”

It can happen that your ammunition hits the fork of the kettie. This can be very dangerous, because the ammunition can go anywhere after it has hit the fork. If in doubt, wear safety glasses! If this happens to you, shoot with clay until you have found the cause. There is nothing as disappointing as shooting a hole in a kettie that you bought and love so much that you sleep with it under your pillow.

The reason for this is almost always the release of the ammunition. It is you, not the kettie. Getting another kettie will not solve the underlying problem.

Some of the possible causes:

- The bands contract unevenly because you are not holding the pouch correctly. Make sure the tips of the pouch are exactly on top of each other before you shoot.
- Or you “flip” the ammunition over your finger when you shoot. Keep the elbow of the arm holding the kettie parallel with the bands to prevent this. Or you are gripping around the ammunition instead of on top of it, which can also cause a “flip” or “speed bump”.
- If you do not hold the kettie upright, it also means the bands will not contract evenly.
- Watch out for damaged bands, or bands that have not been cut and attached exactly the same.
- Anything that causes one band to contract faster than the other has the potential to make you hit yourself or the fork of the kettie.

- The pouch can also cause this. If you use a very soft pouch and you do not place the ammunition perfectly in the middle of the pouch, it can slip out at the bottom or the top on release, with drastic consequences. I myself have shot a chunk out of my hand by using the pre-tied Chinese band sets that come with the poor quality pouches. My suggestion is to use a “pit pouch” or “bra pouch”, which is made so that the ball can only be placed in the pouch in one way. And cut and tie your own bands.

Ask someone to watch you, or to take a video of your hand as you release the shot. It will immediately show you how the pouch leaves your hand.

Beyond the beginner stage.

Once you think you have sorted out your form, have a nice kettie, have your bands nicely dialled in, and you feel you can finally hit now and then, that is where things start to get interesting. When you look at the guys' YouTube videos, or there is someone at the club who can shoot just unbelievably well, the question is: How do they manage it, and why can I not do it too?

Form and consistency make the difference. Your form - how you hold the kettie, your anchor point, how your feet are placed, how you are lined up, how you look at the target, how you approach the shot and your preparation for the shot, makes the difference between hitting now and then and shooting well. People who come from the archery world have usually dealt with all of this before and adapt very quickly to kettie shooting.

I have written a bit more about this here:

<https://kosserasies.blogspot.com/2025/04/zen-in-die-kuns-van-kettie.html>

YouTube videos to search for:

There are quite a lot of YouTube videos on just about anything related to ketties:

Cutting bands and attaching them.

How to make ketties.

How to aim.

How to make a catchbox.

How other cultures make and shoot ketties.

Determining your dominant eye.

Have a bit of a dig around.

Ethics

As a final word, I would like to write something about ethics in kettie shooting as a sport. In certain parts of the world it is already illegal even to own a kettie. If we can no longer shoot into a catchbox in our own backyards, it will do great harm to kettie shooting as a sport.

A kettie can be dangerous and must at all times be handled responsibly. Things you should not shoot at include: your neighbour's (or your own) dog or cat, the weavers that build nests in your backyard

and irritate you, and also not the ice cream truck whose jingle drives you mad. Shoot where it is safe and where nothing and nobody can be damaged or injured.

If you are going to hunt with a kettie, follow the same safety and responsibility that you would with a firearm. One video on social media showing how well you shot the hadida in your garden with a kettie has the potential to make the sport difficult for all of us. The general principle is simple: if you would not shoot at something while the whole world was watching, do not shoot at it when you are alone.

In closing

After all of this has been said, there is no fundamental difference between kettie shooting now and generations ago. The principles are the same. We simply have better bands now than were ever available before, and with the same frame that is 50 or 100 years old or home-made or hand-cut, you can shoot just as accurately as with any bought kettie.

Dirk Lucas
082 895 9427



Thanks to Ivano Mangiagalli for the use of his infographic! (Translated to English)

SLINGSHOT GUIDE

COMPLETE INSTRUCTIONS



YOU WILL NEED

- a **quality** slingshot frame
- appropriate bands and ammunition

GRIP

- Choose a grip that feels **comfortable** to you and is easily **repeatable**, e.g., a 'pinch' or 'brace' grip



POUCH GRIP

Place the ammunition in the center of the pouch/leather patch between the middle of your index finger and thumb

AVOID SPEED BUMPS!
(i.e., no obstructions before releasing the ammunition)



SHOOTING STYLE

- Aim with your dominant eye, using the top of your slingshot frame as your sight on the target.
- Maintain an upright posture with a high elbow.

