THROWING STICKS
the state of the art, today

Why?
Throwing sticks offer the angler the means to fire spherical boilies the maximum possible range, much further than the catapult ever could. With the huge added benefit that there is no perishable elastic that will inevitably snap after heavy use, or a pouch that has the habit of mauling the back of your hands when firing baits out.

How?
The action of using a throwing stick is similar to that of casting. Single baits are placed into the tube and the stick is flicked forward in a fluent sweeping action to propel the bait out. Inevitably this takes a little practice to master. You will initially end up with bait landing at your feet or flying straight up in the air, but when you get the timing and movement right you will be astonished at the consistent distance and accuracy now attainable. It doesn’t take that long to get the hang of it.
Which one?

There are a number of throwing stocks available, made from a diverse range of materials - including plastic, aluminium, carbon and fibreglass - in sizes to suit all the different diameter baits that anglers generally use.

Aluminium was the original material used when throwing sticks were first designed about 15 years ago but these were always heavy and cumbersome to use. Although aluminium throwing sticks can still generate enough power and distance, they require much more effort to use and your arm will be aching in no time!

Fibreglass got round the weight problem but is much more difficult to shape into the best angles, meaning the designs were limited. There are still some fibreglass sticks available these days but they also have the problem of being very fragile and have been superseded in recent years by superior materials.

Carbon is good and offers valuable lightweight performance but the main disadvantage is simply cost; carbon is also difficult to form into a curve shape and although it can be done the price rises significantly...plus carbon is also brittle and more liable to fracture.

The answer? Well that was a question that puzzled many until Gardner came up with the ultimate solution: High grade PVC...the ideal balance of strength, weight and durability whilst still relatively easy to form and shape into the perfect design.

With Gardner’s outstanding Skorpion Stiks, throwing stick design has evolved to afford the boilie angler the absolute highest performance possible in terms of accuracy, range and power.

During testing of all these sticks the Skorpions consistently out-performed all others in every way!
Some facts about the Skorpion Range

• **4 different sizes** suitable for throwing boilies up to 30mm in diameter

• With practice and a hard, dense bait, large boilies can easily be hurled well **over 125m**.

• Made from the finest grade ‘virgin’ PVC for an extremely light weight, yet maintaining remarkable strength and durability.

• **Heat resistant** - Skorpions will not warp, melt or break in hot conditions, or any conditions!

• All the Skorpion Stiks feature a ‘Swan Neck Shaft’ designed to accelerate the bait to a **faster velocity** than standard straight shaft throwing sticks (by kicking the boilie back at the start of the swing, this increases the centrifugal force generated and gives the bait more speed at the end of the swing).

• A modified exit channel gives maximum stability and pin point accuracy.

• **Non slip, soft touch, double handed grip** designed to suit hands of all sizes, or for a two handed technique that exerts extra power for extreme long range and mass baiting.

• **Available in 3 colours:**
  - Carpy Green,
  - Orange
  - Lemon Yellow

...so you’ll never lose it!
Instructions for use

Remember! Correct technique is more important than power...

1. Stand in the normal position you use for casting and always keep your eyes on the target area.

2. Start from the 10 o’clock position... finish in the 2 o’clock position.

3. A flick of the wrist is usually enough to fire several baits at a time.

4. Skorpion Stiks are designed for Single or Double handed use - Experiment to find your preferred technique. You do not need a big swing to achieve good distance, but using 2 hands can give you more control and accuracy.

5. Power and distance will soon come with practice. It pays to perfect a good technique before trying to throw too far.
Top Tips - Distance & Accuracy

For maximum range, aim to fire the baits at an angle of approximately 45°. This is the optimum angle for firing an object, as demonstrated by centuries of ballistics studies.

When using at extreme range you will find that the baits can be fired aggressively at a slightly lower angle, as the very high speed spin means that the baits will tend to lift during the first half of their flight.

<table>
<thead>
<tr>
<th>Size of Stick</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skorpion 18mm</td>
<td>90m+</td>
</tr>
<tr>
<td>Skorpion 22mm</td>
<td>100m+</td>
</tr>
<tr>
<td>Skorpion 25mm</td>
<td>110m+</td>
</tr>
<tr>
<td>Skorpion 30mm</td>
<td>125m+</td>
</tr>
</tbody>
</table>

Depending on the size of stick you use these ranges are easily achievable with a bit of practice and the right bait.

The limiting factor in how far your boillie can be fired is its weight. The heavier your bait, the further it can be launched. For anglers wishing to fine tune their extreme range angling it is possible to include small quantities of super dense ingredients - like limestone flour - to increase the bait’s density and achieve the absolute maximum distance.

It is also possible to fire multiple baits out at any one time, but we recommend that you do not attempt this until you feel you are proficient at propelling single baits accurately. You can fire up to 5 baits out at a time, but the weight of multiple baits makes a massive difference to the feel of the stick and the manner in which you throw the bait with it. It is probably more useful for scatter baiting in this way rather than accurate bait application.

Simple improvements in accuracy can be gained by making sure that the Skorpion Stik is held so that the exit channel is facing straight at the baited area, and also that the sweep of the stick is kept as straight as possible whilst in use. If the stick is not held straight or the sweep is not straight then the bait will curve in flight and this will not help either distance or accuracy when baiting.
Top Tips - Bait Preparation

An occasional problem that anglers face is the splitting of soft baits as they exit the shaft, which happens as a consequence of the massive forces exerted on the bait as it is accelerated and then sent spinning at high velocity out the end of the stick. To counteract this you can either make very hard baits, by adjusting the ingredients in the base mix to include gelling and hardening agents like whey proteins and egg albumen. Or you can also air-dry your baits to improve their durability.

This can be done by leaving the baits in an Air-Dri Bag or on an Air-Dri Tray in a shaded and well ventilated position. If they dry too quickly they can sometimes have a tendency to crack and this will aggravate the splitting problem.

Another good alternative to air-drying is to leave the boilies in with small pellet for a few days. This will slowly remove the excess moisture and dry your baits out – and also leave an attractive pellet smell on your baits (great if the fish in your venue have been fed a lot of pellet). Curing in sugar or salt is also effective at dehydrating the bait over the course of a week or two.

Another solution to the splitting baits problem is to wet the inside of the barrel by dipping the stick in the lake/river and then shaking the excess water off.

This lubrication means that the baits will spin a lot less, but it can also slightly reduce the bait`s velocity, which will affect the maximum potential range.

Throwing sticks are a versatile means of baiting up with boilies and if you get a good one you can quickly achieve great results.

After a while you`ll wonder how you ever did without it!