

The Complete Guide To Hooks

PART ONE

In one of most fascinating features ever, **LEWIS READ** reveals everything you will ever need to know about carp hooks.

Just look through any magazine or catalogue and you'll find a dizzying array of hook patterns available – some of which are designed for specific purposes and some that are based on general fundamental principles that offer good mechanics with a wider range of rig applications.

The hook that you choose for a certain application is, in the terms of us carp anglers and the venues we fish, based upon the type of rig and bait that you use – and this can vary from day to day and even cast to cast. However, for many anglers the exact factors that determine the correct decision are a bit jumbled. In this feature I aim to add a little insight into what makes a particular pattern fit for a specific purpose.

There are particular elements that are universal. To start with, all carp hooks are made from high-carbon steel. The process by which a simple piece of wire is transformed into a finished hook is nothing short of miraculous when you consider the bendy nature of the raw material before processing.

This strength is achieved through two processes. Firstly there is forging, which is a flattening of the sides of the wire. This helps provide the hook with a degree of strength against straightening (by increasing the amount of material in the axis of the bend).

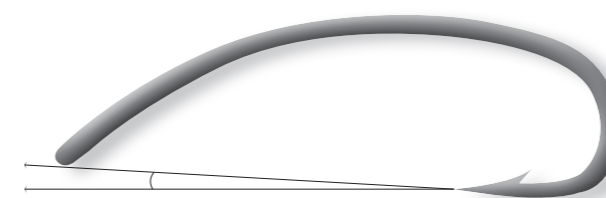
ANGLER FILE **Lewis Read**



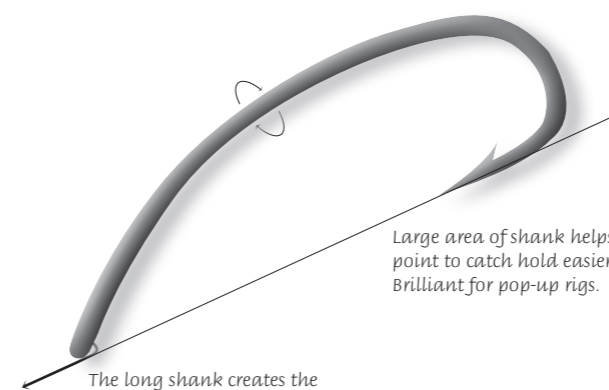
AGE: 42
OCCUPATION: Marketing and product development
UK PB: 47lb 12oz
SPONSORS: Gardner Tackle and Carp Company

Although they are the most important item of your tackle very few people understand the variety and the mechanics of modern carp hooks.

LONG SHANK CURVED – LONG SHANK MUGGA



Effective penetration properties, the overall length aids turning into the fishes' mouth.



Large area of shank helps the point to catch hold easier. Brilliant for pop-up rigs.

The long shank creates the main pivot point at the hook eye, improving turning ability at the point.

Then there is tempering. This is a very controlled heating and cooling process that changes the molecular nature of the high-carbon steel and makes it a lot more rigid. This is absolutely critical and any problem with tempering can be disastrous. Overtempering makes the metal brittle, while too little doesn't give

the hook enough strength. Tolerances are ultra-fine and the very best hook manufacturers, like the ones we source here at Gardner, are from Japan, where every hook goes through a defined

two-stage tempering process that has been proven to offer the most consistently high standard. Next, the hook is given its point through a chemical-etching process (which was arguably the greatest leap forward in carp-catching technology... ever!) and finally the hook is finished in an electroplated or coated (Teflon) finish. And all on a massive industrial scale of many thousands at a time.

Hook plating and coating is an area that has evolved dramatically in recent years and each method

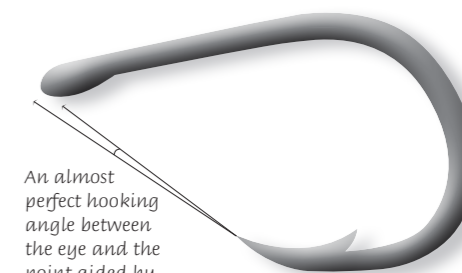
has its pros and cons. Advocates of electroplated finishes like the durable and reliable (but shiny) black nickel or the recent Covert-style plated finishes, argue that they are thinner and bonded to the steel of the hook at a molecular level – and therefore are as refined as they can be. But the popularity of alternative processes, Teflon for instance, shows that customers may not worry about a few microns difference in the final hook!

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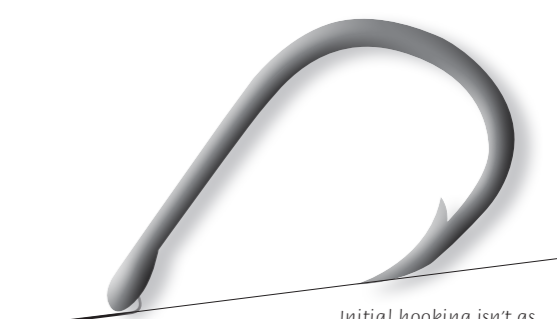
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Tests indicate that large Teflon hooks certainly penetrate better into a bony-mouthed fish like marlin, but do they help in the fleshy mouth of the carp? The jury's out on that one, in my opinion, like so many things in carp angling. ■

BEAKED POINT – WIDE GAPE TALON TIP



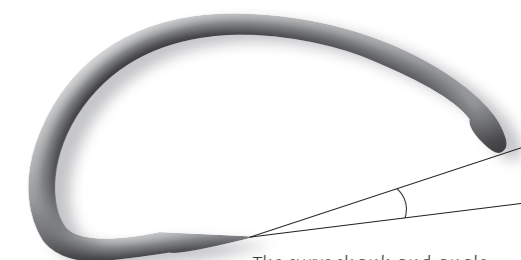
An almost perfect hooking angle between the eye and the point aided by the inturned eye.



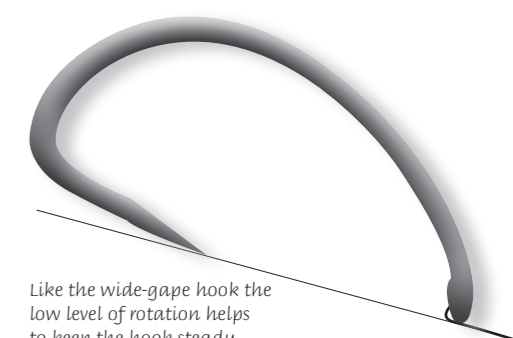
Possesses a small rotational force at the eye, which helps keep the hook in the bottom lip.

Initial hooking isn't as effective with a beaked point. However, fish losses are fewer when compared with a straight point.

CURVED SHANK – MUGGA HOOK



The curve shank and angle of the eye helps improve penetration with the straight point. An efficient hooker.



Like the wide-gape hook the low level of rotation helps to keep the hook steady during the fight, reducing the risk of hook-pulls.

The relatively straight angle of pull helps maintain strong hook-holds during the fight.

The shapes and sizes of the hooks that are created vary enormously, and this is the main focus of this article. But before I jump the gun and start wittering on about hooks for specific rigs and situations, there is a basic fundamental principle that all anglers should be aware of, and that is the key factors governing how a hook penetrates.

Essentially, the angle between the point (including the angle the point is in-facing) and the eye is pivotal. To get an idea of how efficiently a hook will penetrate can be demonstrated by looking at the angle at which the point touches the flesh when the eye is against a flat surface. If the angle is too great the hook point may nick

the flesh but tear across it without bedding in properly because the angle is too severe. This is a fundamental principle and it is this that dictates the inclusion of two design tweaks to allow wide-gape patterns to function in a manner that means they work at all! By incorporating a beaked point and inturned eye, hook manufacturers are compensating for the imbalance in key properties governing the hook's ability to penetrate fully by improving the direction of pull exerted by the eye and the direction the point wants to go in.

When you have got your head around this key relationship between function and design you get a clearer basis on which to design rigs that work in concert with specific patterns and why specific patterns have particular specifications – and hence the proliferation of patterns that fulfil niches and specific rig requirements.

There are other tweaks that are included to make a pattern work, like bringing in the angle of the whole (straight) point towards the shank – not to be confused with beaked points



The tempering process of hooks is done on a scale of many thousands at a time and at super-high temperatures.

– but essentially this is again related to the angle the point attacks and penetrates in those critical moments until it is set and embedded fully to the bend. So, you see the basic principle of penetration is pivotal in making a hook that works across a variety of rig applications.

As rigs have evolved with the development of new baits and tactics they have naturally driven the evolution of new hook patterns, and this has been in tandem with the development of new hook processes and finishes. The last decade has been an exciting time in terms of the quality and quantity of hooks available to us as carp anglers. You could even say we're a bit too spoilt for choice now!

Killer Kit Of The Pros

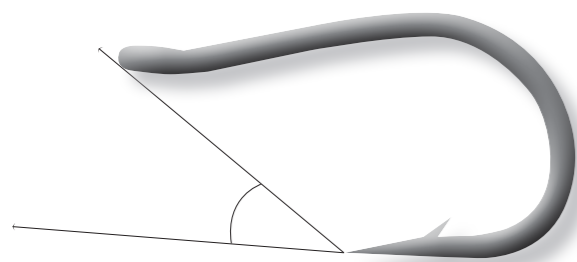


The hook aligner helps improve the hooking ability of a shorter-shank hook so it mimics that of the long-shank-style hook pattern. The small Hook Aligners from Gardner are a great alternative to shrink tubing.

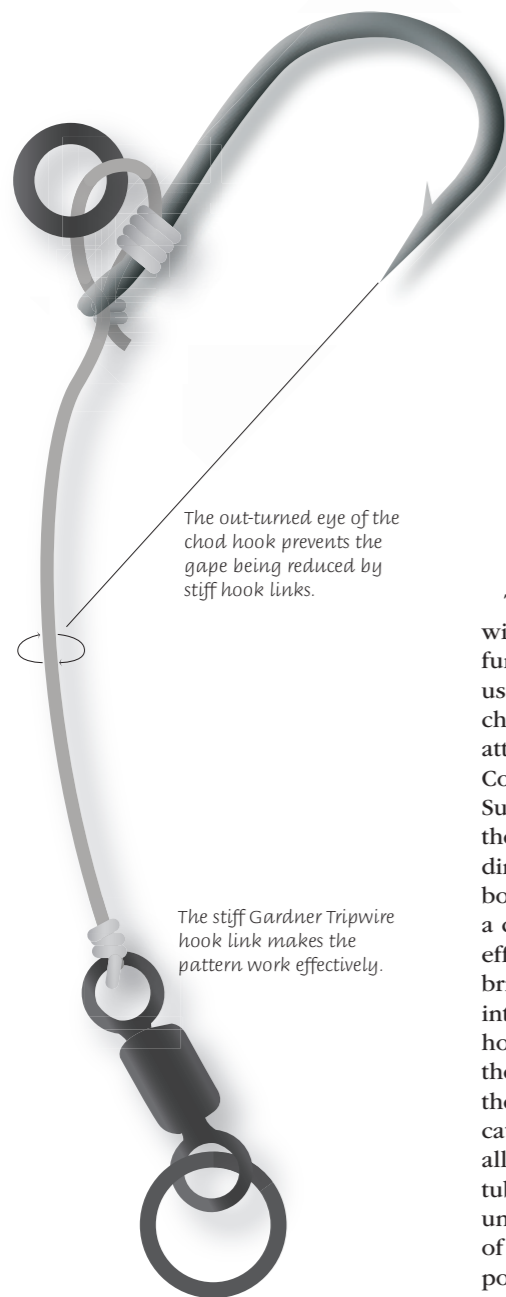


The shrink tubing allows you to mimic the hooking ability of a long shank with a short-shank hook. It is also a lot more fish friendly, especially when targeting small carp.

CHOD HOOK



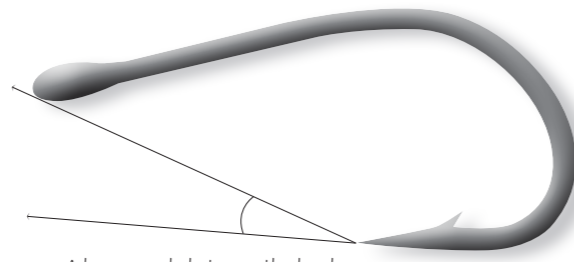
The large angle makes the hooking ability less efficient when used with the wrong choice of hook link.



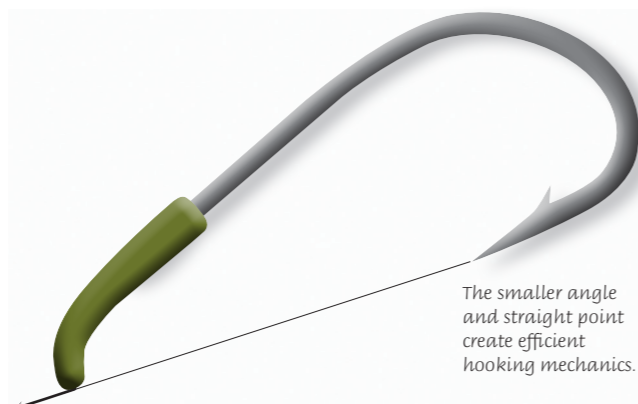
The out-turned eye of the chod hook prevents the gape being reduced by stiff hook links.

The stiff Gardner Tripwire hook link makes the pattern work effectively.

STRAIGHT EYE/STRAIGHT POINT – INCIZOR



A large angle between the hook point and eye make the Incizor less effective at hooking fish...



The smaller angle and straight point create efficient hooking mechanics.

... however the kicker creates a smaller angle, making the Incizor's hooking ability super efficient.

To my mind, I can make a fairly wide variety of hook patterns function in an effective manner by using specific hook-link materials, changing the manner in which I have attached the hook, or by adding a Covert Hook Aligner or a kicker of Supa-Shrink tubing. The addition of the kicker effectively adds several dimensions that assist the hook in both turning and penetrating when a carp picks up the hook bait. By effectively lengthening the shank and bringing the exit of the hook link into closer alignment with the hook point, you are improving the penetrative capacity of the hook as the point first catches hold. After that point all tube-style aligners and shrink-tube kickers tend to straighten under pressure and then it's the design of the hook itself that controls how the point continues to go in.

Another benefit of adding a kicker that extends the hook shank is that the pivot point of the hook is set further away from the hook point, and fundamentally this change means

that the hook gains a better hook-hold a little further into the carp's mouth. Rather than the hook mechanically turning on the eye, it flips at a point centred on the exit of the hook link from the tubing – emulating long-shanked or even cranked and curved hooks without the potential for damaging small fishes' mouths.

The topic of bent hooks has been highly talked about by some. Now many of us older carpers will recall the introduction of the first bent hooks, which caused a stir in the big-fish world because they accounted for a string of awesome big carp. They had a pronounced crank in the shank and turned really aggressively in the fish's mouth but there was considerable anecdotal evidence that seemed to indicate that they had a propensity to be harsh on their mouths. As a consequence, their use was banned on a number of fisheries. Having tested, fished with and assessed a great many different hook patterns over the years, I can see that these hooks are harsh – particularly on small carp that tend to run around and shake their heads

about and change direction more regularly than a steady fight off a big old lump. Because it is this change of angle that causes the hook to pivot like a can opener, you can see why the potential for mouth damage is increased. Long, curved-shank hooks work slightly differently, but anglers using them should be mindful of the



Many hooks feature a black nickel finish, known for its hard wearing and anti-corrosive properties.

small-fish issue and use a flexible kicker that broadly mimics the mechanical effect of hooks like the Long Shank Mugga. There is no doubt that they work superbly, though, and offer improved hooking potential and extremely good penetrative properties, but if in doubt... use your nous. **TC**



The size 8 Talon Tip with an inturned eye worked well with the supple braid hook link inside a solid bag, landing Lewis a stunning 26lb mirror.