

BOW SIGHT GUIDE

INTRODUCTION

A bow sight is a device that's mounted on the riser of your bow that helps you to aim your arrow. Much like the bead at the end of a shotgun barrel, the bow sight simply helps tell you where your projectile is pointed. Though it is possible to shoot your bow without a sight (known as "instinctive shooting"), doing so is exceedingly difficult - especially at longer ranges. As such, virtually all modern compound bows are outfitted with some kind of sight. Used in conjunction with a peep-sight or kissers-button and a quality arrow rest, even novice archers can be surprisingly accurate.

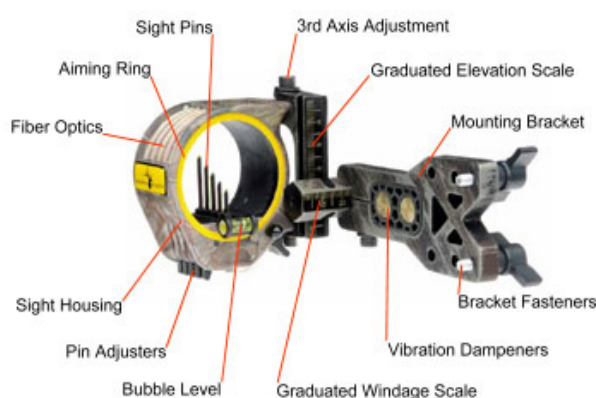


BOW SIGHTS: BASIC TO EXTREME



Some bow sights are quite simple, like the one on the left. This is an example of a straightforward fibre-optic 3-pin composite (plastic) sight, with a Lexan pin guard, and twin pin tracks. Each pin can be positioned up or down in its track for elevation adjustments, and each pin can be screwed in and out of the mounting bracket for windage adjustments.

This type of sight is very functional, isn't too difficult to adjust, and would be sufficient for most hunting and recreational applications. This type of sight costs under \$20 and easily installs with just two allen head screws.



As you might expect, sights come in a variety of styles and levels of sophistication. The second sight shown here is quite different - a rather complex sight with many added features. This machined aluminium and composite sight offers gang-adjustments (all pins can be moved at once) for windage and elevation, as well as adjustments for each individual pin. This sight also incorporates more fibre-optics, vertical pin technology, a subliminal aiming ring, an anti-vibration device, camouflage finish, graduated scales, "no-tools" cam adjusters, pin lights, drilled and tapped quiver mount, and 3rd axis (torque) adjustments. In short, this type of sight is "loaded" with some premium features. Of course, these premium features don't come cheap.

There are plenty of models more advanced than this one. High-end competition and hunting sights can cost as much as \$250 or more.

HOW MUCH SHOULD I SPEND?

For a basic hunting rig, it surely isn't necessary to get the most deluxe sight on the market. But for rugged field use, you might not want the most basic plastic model either. A solid machined aluminium sight, with good fibre optics and easy adjustability is all that most bowhunters need in the field. In fact, most hunters select the popular "mid-grade" sights that offer some of the premium features - without going overboard. A \$30-60 investment will buy you a fine-quality hunting sight. Of course, if you plan to participate in some 3D competitions, or if your style of hunting requires a more specialized sight design, you might want to consider a more deluxe model. The choice is up to you. To help you make a better-informed choice, we've broken down the major sight types, features, and popular options here in our Sight Selection Guide. We hope you find the information useful.

MAJOR SIGHT TYPES

FIXED PIN SIGHTS

A fixed-pin sight is the most common type of sight, and the popular choice of hunters. A fixed-pin sight usually has 3 to 5 individual pins, which can each be set for a particular known distance. The top pin is for the closest distance, the lower pins are for longer distances. Once set, the pins are tightened and remain "fixed" in position during use. Setting up and adjusting a fixed-pin sight is pretty simple, but it does require some trial and error testing. And for those shooters who take their time, and set each pin just right, the fixed-pin sight yields excellent results - as they're very reliable and easy-to-use in the field.



Most hunters set their fixed-pins for easy-to-remember distances, usually in 5 or 10 yard increments. Once the pins are set, shooting known distances is a snap. If your target is 30 yards away, you simply sight the bow by placing your pre-set 30-yard pin on the intended target - then shoot. The sight does all the compensation for the change in the arrow's trajectory. But the tricky part comes when shooting unknown distances, as you must be able estimate the actual distance to the target, and choose the best pin for that distance. Mastering the skill of yardage estimation isn't so easy, especially when shooting from an elevated position, over uneven ground, or through dense foliage. But it's a skill every bowhunter needs.



If you set your pins for 20, 30, & 40 yards (common setup), there's no guarantee your game animal will be courteous enough to stand precisely at one of your preset distances. So in addition to accurately estimating yardages, a fixed-pin shooter must learn to compensate as necessary for intermediate distances for which no pin is set. If your target is 25 yards away, your 20 yard pin will shoot a bit too low - your 30 yard pin too high. So most fixed-pin shooters must learn to split the difference, and hold somewhere between the pins, known as "gap-shooting".



Of course, some shooters don't like to "gap-shoot", and prefer to simply add more pins. More pins in a sight means you can set the pins for smaller yardage increments within your bowhunting range. For example, if you have six pins set for 15, 20, 25, 30, 35, & 40 yards, chances are you'll have a pin that's set for the distance you need - at least in most hunting situations. However, there is a downside to this strategy. First, you'll

have to remember the distances all those pins are set for - which might not be so easy when you're tired, cold, hungry, and staring down at a trophy buck. But more importantly, excessive pins in your sight means that more of your target is obscured behind the pins, which can make shot placement more difficult, especially for fast bows with tight pin-gaps.

At the other extreme, some shooters actually prefer a simple single-pin strategy for hunting. If for example, a single pin is set for 25 yards, you can learn to "hold high" for distances beyond 25 yards, and to "hold low" for distances inside of 25 yards. With a little practice, this method too can be quite effective - especially when shooting a fast bow. It takes some experimentation to learn the right amount of compensation, but if you learn that your 25 yard pin lands 6" low when shooting at 35 yards, you can compensate by simply holding the pin 6" high on the target. If the pin lands 3" high at 15 yards, you can compensate by holding the pin 3" low, and so on. Again, this method takes some practice and good estimating skills. So it isn't for everyone either.

Fortunately, most fixed-pin sights allow the easy removal or addition of pins. So if you want to try your luck with the single pin technique, the standard 3-pin "gap-shooters" setup, or even if you want a whole gaggle of pins, a fixed-pin sight will give you some options. Whether you choose a simple \$20 model or a fancy \$100 model loaded with extras, the fixed-pin sight is an excellent choice for both hunting and recreational archery. We recommend this type of sight for most applications.

MOVEABLE-PIN SIGHTS

A moveable pin sight is a little different. Rather than have multiple pre-set pins, a moveable pin sight usually has a single pin, which is adjusted before each shot. The moveable pin sight has a system of brackets, levers, or worm gears that smoothly slide the entire sight housing up and down, so the pin can be adjusted for any distance in just a few seconds. At the rear of the sight bracket, a small adjustable pointer indicates

the yardage along a graduated scale or a series of handmade marks on white tape. Each mark represents a known yardage. So if you come upon a target which is 30 yards away, you simply move the pointer to the 30 yard mark and shoot. Unlike the fixed-pin sight with individual pins set for specific distances, the moveable pin sight can be adjusted to any distance just by moving the pointer. The user can have as many references (yardage marks) as he or she wishes. In fact, providing you had enough patience and a sharp enough pencil, you could make a mark for every yard.



Realistically, most moveable pin shooters make their yardage marks in typical 5 or 10 yard increments, then use some system of compensation for intermediate yardages - much like a fixed-pin shooter. A typical moveable pin sight might be setup with marks for every 5 yards. So if your target is 27 yards away, you must adjust your pointer so that it is between the 25 and 30 yard marks. This system is actually quite accurate, as it allows yardages to be carefully adjusted on a scale, before the bow is ever drawn back. As such, moveable pin shooters often have an advantage over fixed-pin shooters. In fact, the IBO and ASA have separate competition classes for shooters using fixed-pin vs. moveable pin sights.

So is the moveable pin sight better? In some ways yes. But as you might expect, every rose has it's thorn. If you're shooting at unknown distances, your success with a moveable pin sight will still depend on good yardage estimation. And while the moveable pin sight is great for general target shooting and competition, it isn't nearly as popular for hunting. Many hunters don't like the idea of having to reach out and adjust their sight before each shot. In a hunting situation, there may not be enough time to adjust the sight, and the added step also provides another opportunity for game to detect your movements. You'll also find that the moving parts on a moveable pin sight often interfere with standard quiver mounting. But with all that said, there are many hunters who use the moveable pin sight very successfully - and many target shooters swear by them.

PENDULUM/TREESTAND SIGHTS

A pendulum sight is still another approach.

A pendulum sight is primarily designed for treestand hunters, as it helps to compensate for elevation on downhill shots. Treestand hunters have always struggled to accurately judge yardage from an elevated position. To make matters worse, an arrow that is fired downhill gets a little help from gravity and tends to land too high - especially at steep downward angles. The pendulum sight promises to alleviate these struggles. The pendulum, or treestand sight, usually has a single pin which is mounted on a hinged pendulum swing. As the bow is tipped forward (shooting downhill), the sight pin swings out and up, automatically compensating for your downward shot angle. The steeper your shot angle, the more the sight compensates for you. It's a fantastic idea, and many treestand hunters use the pendulum sight with great success. However, the pendulum sight isn't for everyone or every situation either.



Most pendulum sight manufacturers make elaborate claims about the accuracy of their sighting systems. Most pendulum sights are advertised to be accurate from 0-30 yards (within a typical bowhunter's range). Of course, the term "accurate" is used a little loosely here. Bowhunting accuracy (just hitting within the vitals area of a game animal) and absolute accuracy are different things. For a pendulum sight to be absolutely accurate within a specific yardage range, the sight must be calibrated for a exact arrow velocity and the shooter must be elevated to a specific height. And even then - there are some variables for which the pendulum sight cannot totally compensate. So your actual accuracy with a pendulum sight will likely be more "relative" than absolute. And it's worth noting that the

pendulum sight is particularly ineffective for longer range shots and/or when shooting from the ground. In fact, some pendulum sights even have secondary fixed-pins installed just to allow better accuracy at longer distances.

But let's give credit where it's due. When it comes to compensating for downhill angles on short-range treestand shots, the pendulum sight offers a respectable advantage over the standard pin sight and the "best guess" method. If you're exclusively a treestand hunter, and most of your shots are taken at relatively close-range, the pendulum sight may be ideal for you. Just realize that no sighting system is totally fool proof, in spite of any exaggerated advertising claims to the contrary. Your best chance for making that critical shot will still rely on good shooting technique and the application of some common sense.

3D COMPETITION SIGHTS

A 3D Competition Sight, often called a Target Sight, is a specialty sight which is designed for use in competition. Due to the size, cost, and complexity of these sights, they are rarely used for hunting - but they are arguably the most accurate sights available. A 3D Competition Sight is essentially a fancy Moveable Pin Sight with a sophisticated system of windage and elevation click-adjustments. Target sights are larger too, usually mounting 6-12" forward of the bow's riser via a quick-disconnect dovetail system.



Target Sights usually have an 10/32" threaded receiver which will accept a variety of aiming points (single pin, a scope-style sight, laser sight, etc.) which are all sold separately. Once accessorized and properly setup, this type of sight is amazingly accurate. But obviously, this sight isn't for everyone either.

It's common for a serious competition shooter to have well over \$400 invested in their Target Sighting system. A good quality Target Sight can easily cost \$200 or more. Then adding a quality scope and magnifying lens can quickly tack another \$100-200 to the cost of the base unit. These advanced sighting systems are very well designed and are manufactured to the most exacting tolerances. But their usefulness is limited to applications where this type of precision is necessary.

MAJOR SIGHT FEATURES

FIXED PLATE vs. DOVETAIL MOUNT

Most sights are the fixed-plate design, meaning that the sight bracket is attached directly to the bow. A fixed-plate sight is generally mounted on the



Fixed-Plate Mount



Dovetail Mount

bow with two allen screws and the entire bracket and sight remain on the bow at all times. A dovetail mount is a little different. A dovetail sight works by mounting a separate small retainer bracket to the bow, which has a dovetail groove machined into it. The sight is fitted onto a separate extension bracket which is machined to fit the dovetail groove. To put the sight onto the bow, you slide the extension bracket into the retainer bracket and tighten some type of retaining nut (usually a large thumb screw). So the dovetail mounted sight comes on and off the bow very easily. The fixed-plate sight does not.

As a general rule, hunters prefer the simplicity and reliability of the fixed-plate design. And it stands to reason, as there's typically no need to repeatedly take a sight on and off of a hunting bow. However, 3D and competition shooters often prefer the dovetail mount. A dovetail mount will allow the use of multiple sights - presuming they all share the same brackets. A serious competition shooter may use more than one sight (different sized pins, different magnifications, a back-up sight, etc.) and the dovetail mount makes changing the sights a snap. Also, dovetail sights tend to be longer - positioning the pins further away from the shooter for increased accuracy in competition. Of course, a bow outfitted with an extra-long sight generally doesn't fit into a standard bow case - so the sight must be removed after each use before the bow can be put away. In that respect, a dovetail mount is a very handy feature for long competition sights.

There isn't a right or wrong here. Certainly you could hunt with a long competition-style sight. But again, most hunters stick to the simple fixed-plates which present fewer things to go wrong. We should also note that if you intend to use a dovetail sight for hunting, you may have trouble installing a bow-mounted quiver. Most popular quivers attach the bow at the sight bracket. And in many cases, a dovetail mount thumb screw can interfere with the mounting of the quiver - usually requiring a spacer kit to make it all fit together properly.

FIBRE OPTICS

Fibre optic technology is primarily designed to carry digital information over long distances. But the hunting and shooting industry has found another use for this remarkable product. At the core of a fibre optic cable is a strand of optically pure glass or plastic. Surrounding the optical glass is a special coating called the cladding, which reflects the light back into the core. So



when the translucent cable is exposed to sunlight (or any other light source), light gets effectively "trapped" in the core of the cable. At the end of the cable, where the core is

exposed, the light is able to escape. This creates a wonderful phenomenon that makes the tip of the cable appear to light-up - as if powered by a battery. And the longer the fibre-optic cable, the more light it can gather and the brighter the tip becomes.

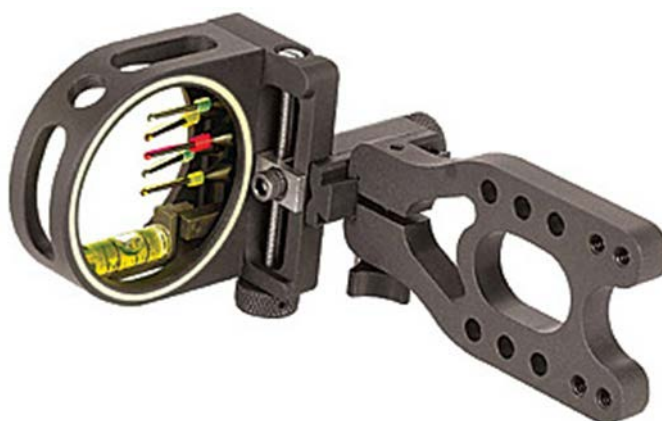
In the hunting and shooting industries, these fibre optics cables have been put to use - not for data transmission - but as a sighting device. The small bright tip of a fibre optic cable makes an excellent aiming point on a bow or gun sight. Even in low light dusk & dawn conditions, the tip of the fibre optic cable still stands out clearly - allowing the shooter to aim and fire his weapon. Most of today's hunting sights are outfitted with some kind of fibre-optics pins.

Most fibre optic sight pins have between 1/2" and 2" of fibre optic cable, usually situated behind the pin or wrapped around the base of sight pin. And this seems to be enough to provide an adequate increase in pin visibility. But a few manufacturers take the concept to the extreme - designing sights to specifically incorporate huge amounts of fibre-optic cable. The sight on the left uses 24" long fibre optic cable coils for each pin. This produces a remarkably bright pin that practically glows in the dark. But before you choose this type of sight, be warned that you can have too much of a good thing. It may be possible for a pin to be too bright. Ultra-bright pins can often create a halo or starburst effect that can be very distracting - akin to looking into a bright light. As such, we recommend you choose pins that have reasonable amount fibre optics.

Sight pins come in a variety of sizes; the most common are the .019", .029", and .040" pins. The smallest pins are the micro-fine .019" pins, available as an option on many of today's popular sights. These tiny pins allow for very fine shot placement with minimal loss of sight picture. However, tiny pins can be difficult to see in some conditions, and they don't shine as brightly as the larger .029" and .040" pins. Large .040" pins offer a brighter and more distinct aiming point, but they cover more of the target in the sight picture - which is especially noticeable when taking shots at longer distances. Again, another trade-off to consider. So as you might expect, bowhunters want the best of both worlds, so the moderately fine .029" pins are the most popular choice today.

BUBBLE LEVELS

Many of today's mid to high grade sights now feature an integrated bubble level. This feature helps you keep your bow perfectly upright when shooting. Unlike recurve shooters, who'll often deliberately shoot with a canted (tilted) bow, compound shooters typically want their bows to be perfectly upright when fired. If you cant your bow to the right, your shots will land a little right. If you cant your bow to the left, your shots will land slightly left. In short, canting the bow degrades your horizontal accuracy. And MANY shooters cant their bows without ever realizing it. So the bubble level helps to add an element of consistency into your shooting routine. The only downside is that aligning the bubble level adds an extra step to your aiming process. But with practice, using the bubble level eventually becomes second-nature.



Bubble Levels for Left-Handers: Some sights are not made as RH or LH specific models. Some sights are intended to be universal for both RH and LH use. In this case, all sight functions generally remain the same regardless of whether the sight is mounted as a RH or a LH model. However, if this kind of sight comes with a bubble level, the bubble level will appear at the top of the sight for left-hand users. But not to worry, a straight bubble level will perform just as well at the top of the sight aperture as it will at the bottom. But please note that a few bubble levels are cambered (curved) and cannot be used upside-down. If the sight you like does not come in a LH specific model, make sure it does not use a cambered level.

GANG ADJUSTMENTS



A gang adjustment is a feature on a sight that allows you to move all the pins simultaneously. Gang adjustments can be for elevation (up/down) or for windage (left/right). The sight on the left features both gang-elevation and gang-windage adjustments - meaning that all the pins can be adjusted up or down or side to side together. By loosening only one screw and sliding the dovetail bar up or down in the groove, the entire sight housing and all the pins can be raised or lowered. Similarly, a separate fastener allows the entire sight housing and all the pins

to be moved horizontally. Not only do these features make the initial setup and sighting-in easier, but these features give the sight greater range of possible settings.

We suggest you look for sights that incorporate these features. Sights without gang adjustments are generally more difficult to adjust and setup, as each pin has to be individually adjusted for both windage and elevation. Fortunately, the majority of today's machined sights feature the easy gang-adjustments.

MICRO ADJUST WINDAGE & ELEVATION

Generally, gang adjustments are made by loosening a screw and then sliding the sight housing to a new position. But some sights are designed with a micro-adjust feature which allows gang windage and elevation adjustments to be made by turning an adjustment knob (usually attached to a simple gear that drives the motion of the housing). So instead of sliding the sight housing, you simply turn the knob or screw - and the sight housing slowly creeps to its new position. Micro Adjust sights are very precise and easy to work with, but they are typically quite expensive. If your budget permits, a micro adjust sight is certainly a

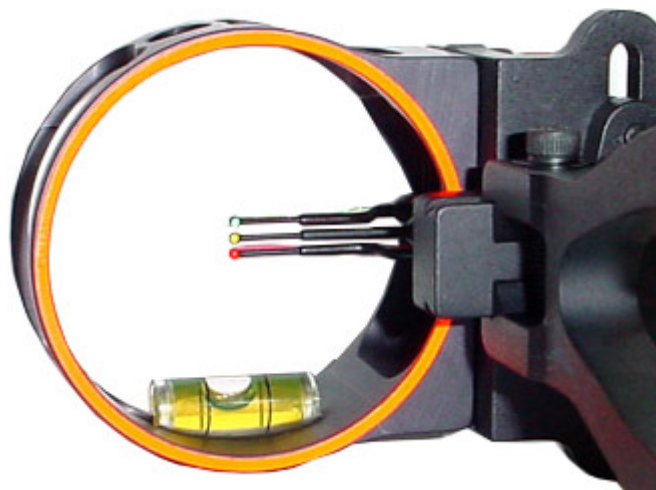
nice piece of equipment. But this is a luxury feature that isn't really essential to a good hunting sight.

ZERO PIN GAP

As compound bows have gotten faster and faster, the space between our pins (pin gaps) seem to get tighter and tighter. For example, a bow that's shooting 300+ fps may have 20 & 30 yard pins that are virtually right on top of one another. To accommodate faster bows, many manufacturers are designing sights so the pins can be spaced very close together. This is usually accomplished by using multiple pin-tracks and/or angled pins such that one pin can be literally set on the edge of another. Sights designed with this feature are said to have "zero pin gap" capability.

With a little marketing magic, "zero pin gap" has become a buzz-phrase in the industry. And as you might imagine, some sight manufacturers interpret the word "zero" a little differently than others. We find that better than half of the "zero pin gap" sights on the market can't actually be set for absolutely zero pin gap - but they get close.

The point is... if you shoot a zippy bow, you may need to consider a "zero pin gap" sight that will allow you to set your pins very close together. Especially if you plan to set your pins within a tight bowhunting range, say 10 -20 -30 yards, a zero pin gap sight will be a must. Fortunately, most bow sights currently on the market feature zero-pin-gap capability. If your bow isn't such a speed demon, a standard single-track pin sight will work just fine.



2ND & 3RD AXIS ADJUSTMENTS

Some sights feature 2nd and 3rd axis adjustments options. Admittedly, these features probably aren't necessary for a general purpose hunting rig. But for us hardcore enthusiasts and pathological tinkerers, these advanced adjustments are handy innovations. 2nd & 3rd Axis adjustments essentially ensure that your sight's bubble level is always telling you the truth.

The 2nd Axis adjustment essentially deals with "levelling the level" on a sight. If a sight has a built-in level, and the sight is machined perfectly square, and the bow's riser is similarly perfectly square, the level should read a perfect zero-bubble when the bow is held upright at 0°. It's an easy thing to check if you have a carpenter's level. Just hold the carpenter's level along the side of the bow and stand it upright. If both the sight level and the carpenter's level come to zero-bubble at the same place, the sight's 2nd Axis is correct.

Naturally, you would think that all sights and bow risers are machined to be square. So you should be able to just bolt your sight in place and everything should line-up perfectly, right? Well, not necessarily. A sight's bubble level is usually installed in the outer pin guard, which is typically round or trapezoidal in shape. So getting the bubble level mounted in just the right place can be tricky business. It's not unusual to see a bubble level that's off a degree or

two. And the fussy archer can spend many hours trying to shim and correct a 2nd Axis problem.

Fortunately, some sights come with an adjustment that allows you to "set" the level with just the turn of an allen wrench. A sight with 2nd Axis adjustments allows you to adjust the position of the entire sight housing - relative to the bow's riser, so that your sight's level correctly indicates when the bow is perfectly upright. This isn't a complex feature to incorporate into a sight. Nonetheless, 2nd-Axis adjustments are typically available only on the more expensive sight models.

With all that said, obsessing over the issue of 2nd Axis is largely unnecessary. The whole point of using a bubble level is to keep you from canting (tilting/leaning) the bow when you shoot it. But most people can't hold their bows up perfectly upright at 0°, even with a bubble level. Everyone bobbles a little while aiming - so we're all bound to be off a degree or two from shot to shot. The bubble level just helps us to get it reasonably close. As such, fussing over a perfect 2nd Axis setting is probably inconsequential to overall accuracy for most bowhunters. But if you enjoy the technical hair-splitting, the 2nd Axis adjustment sight might be perfect for you!



The 3rd Axis adjustment is a little different. A sight with 3rd-Axis adjustments can be adjusted so that the entire sight housing can swivel inward (to a position less than square) or outward (to a position beyond square). At first glance it would seem

that setting the sight for a perfect 90° would be best (centre sight in photo). But that isn't always the case. The 3rd Axis adjustment helps to compensate for that.

Getting your 3rd Axis right essentially means getting the plane of the sight to be perpendicular to the path of your arrow. But due to individual shooting form variations, 3rd Axis levelling cannot be done on a vice or jig. It must be done at full draw. It's also worth noting that some bow risers can flex considerably at full draw - also degrading 3rd Axis alignment. So again, a 3rd Axis adjustment is best made with the bow at full draw. If you select a sight with 3rd Axis adjustments, contact the manufacturer for the specific setup procedure for your 3rd Axis settings.

So why does a 3rd Axis adjustment matter? On level ground, it really doesn't. But an improperly set 3rd Axis can cause your level to give an inaccurate reading when shooting uphill or downhill. This can result in you executing your shot with a significantly canted bow - and missing your mark to the left or right. Again, this is an advanced feature for which the benefits may not justify the added expense and setup time. But if you're serious about getting most from a bubble-level sight, 3rd Axis adjustment might be an important feature to consider when choosing a new sight.

MACHINED ALUMINUM vs. PLASTIC

Most of today's quality hunting sights are made from machined aluminium (aluminium alloys actually). Aluminium is an ideal material for this application, as it is lightweight, it doesn't rust, and it is readily available. With thoughtful engineering and the aid of CNC (Computer Numeric Control) machining technology, sight manufacturers can create very precise and intricate aluminium sight designs. Of course, CNC machining isn't exactly cheap. You can expect to pay \$50 or more for a sight that has all machined aluminium parts.

That's why it is common to see sights that have some machined parts and some plastic parts. Many of today's popular sights feature a machined aluminium mounting bracket and frame, with a plastic pin guard. And this isn't to suggest that plastic is bad. Some plastic parts are actually quite durable.



Advances in materials science have come along in the last few years enabling accessory manufacturers to build some very high quality composite sights. For a couple decades now, polymer framed handguns have been strong sellers in the firearms market. Their light weight, high reliability, and extreme durability have made them favourites among shooters. Finally the archery industry is catching up!

Sights such as the Trophy Ridge Cypher (Shown to the right) have proven to be just as durable as their aluminium counterparts, with a substantial weight savings. There was a time when many of us wouldn't have touched a plastic sight with a 10 foot pole. With modern materials, those old concerns just aren't as valid as they once were. While we still recommend steering clear of low end, cheap, plastic sights. Modern polymer sights can offer substantial weight savings and durability advantages.

SIGHT LIGHTS & RADIOACTIVE PINS

Some sights are designed to use a secondary light source to illuminate the pins - either via battery power or chemical light sticks. Some sights come with this feature already incorporated into the sight, but most manufacturers offer a sight light as an added accessory. The price of a sight light varies from brand to brand, but most cost about \$20 or so.



Optional sight lights frequently mount into a pre-drilled opening in the sight's outer housing. The sight light either shines directly on the sight pins, or on the fibre-optic elements of the pins, causing the pins to be visible even in total darkness. Of course, with this type of light, the user must turn the light on and off.

A few manufacturers take a more unique approach, infusing their sight pins with small amounts of radioactive tritium or phosphorescent powder. Tritium pins glow softly for up to 10 years without the need for batteries. Phosphorescent pins aren't radioactive, but work much like a "glow-in-the-dark" novelty item. The pins absorb ambient light and then slowly remit the light after the light source is removed. So theoretically, a phosphorescent pin will remain visible for a brief period of time after dark.

All of these devices may indeed extend your hunting hours and pin visibility during dawn and dusk conditions. But a lighted pin is not a "night vision" system; it will not increase your visibility through the peep sight or illuminate your target. So even though you may be able to see your pins, you still may not be able to execute an ethical shot. And in spite of how it may seem, lighted bow-sighting devices are not intended to facilitate hunting big game in the dark.

