

Spinning vs. Baitcasting: The Reel Facts

Since the day the spinning reel and the baitcasting reel were invented, the argument over which is best has divided the fishing community. Baitcasting reels and spinning reels are the two most popular styles of fishing reels in the professional fishing world. Baitcaster enthusiasts and spinning reel enthusiasts will argue until the seas run dry on why one is better than the other. Much of the time, opinions are formed at a young age when one receives their first fishing pole. Whether that outfit is spinning or baitcasting often creates a deep-rooted bias towards one and against the other. When you analyze the mechanical concepts of the two different reels, you find that their inner workings use two completely different methods to achieve the same goal. Through my research and personal experiences, I will breakdown each style of fishing reel, their inner workings, applications, and means of operation. By providing this information in an objective and unbiased manner, I hope that you can form your own opinion on the subject. Note that the conventions for orientations are presented from the perspective a right-handed fisherman, however, both reel types can be purchased in left handed models.

The Baitcasting Reel

Let us start with the baitcasting reel. The baitcasting reel is often in the minority when it comes to reel preferences. The main argument against the baitcaster, some say, is that it is “harder to use” compared to the spinning reel. If we examine how the baitcasting reel is operated, we can see why this argument has some merit.



Figure 1-1

This is the baitcasting reel. The baitcasting reel works by using a rotating spool to cast and retrieve the fishing line. The reel sits on top of the fishing rod and the handle is turned by your right hand as shown in **Figure 1-2**. The baitcaster requires a specific type of rod that has a lower finger grip on the bottom making it easier to hold. (Source 4)



Figure 1-2

The Breakdown

Figure 1-2 is a breakdown of the key components of the baitcasting reel and their definitions. Knowing how these components work is essential to understanding the advantages and disadvantages of the reel.

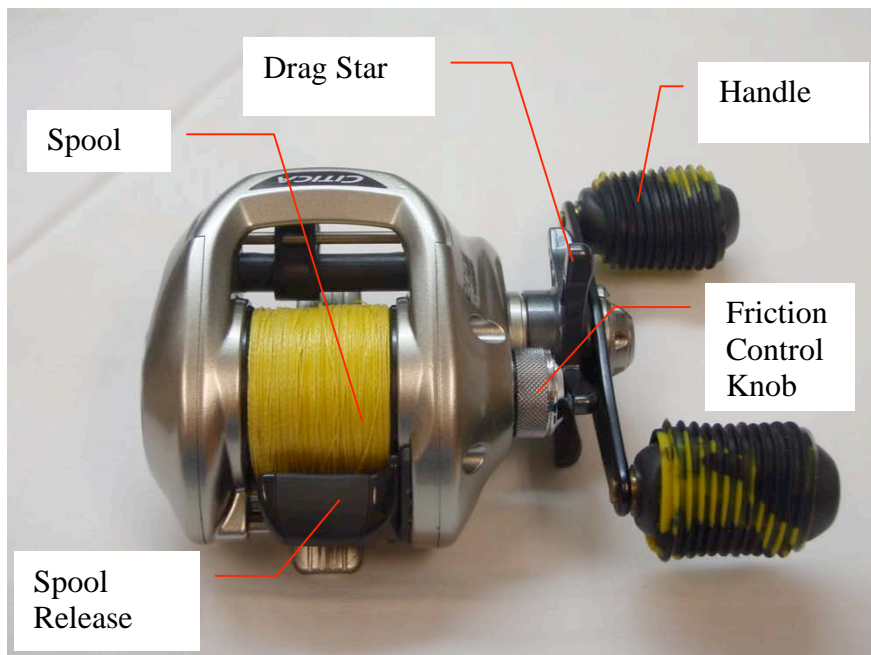


Figure 1-3

Spool- The spool is the cylinder in the very center of the reel containing the fishing line. When casting, the spool will rotate quickly to dispense the line. You must use the tip of your thumb to keep the spool rotating at a relatively constant speed or the line will “backlash” meaning the spool will continuously spin faster, letting out more line than necessary. With the extra line accumulating around the spool, it eventually catches on itself and gets tangled as shown in **Figure 1-4**. Keep in mind that this happens in less than a fraction of a second.



Figure 1-4

Spool Release: The spool release is a button pushed by your right thumb prior to casting. This button allows the spool to rotate freely.

Drag Star: The drag star is a small wheel with knobs protruding from it. When the wheel is rotated clockwise, it tightens the drag. When the wheel is rotated counter clockwise, it loosens the drag. Drag allows line to be pulled off the spool when the spool is not in cast mode. This is necessary when fighting large fish because without the drag dispensing line when a fish exerts excessive force, the line, the rod, or the reel might break. Think of the drag as an electrical fuse. When there is too much strain on the line, it gives out before major equipment is damaged. By turning the drag star, you can adjust how easy or how hard it will be to pull out line. **Figure 1-5** shows a better picture of the drag star:



Figure 1-5

Handle: The handle is rotated in a clockwise direction with your right hand. This rotation spins the spool thus retrieving the line. After casting, rotating the handle will re-engage the spool and take it out of casting mode.

Friction Control Knob: The friction control knob is a simple screw cap. The cap presses down against the shaft of the spool. By turning the cap clockwise, you increase the pressure and friction on the spool shaft. This will increase or decrease the spool's ability to spin faster or slower. This should be adjusted for different lure weights and helps to reduce backlashes. The friction control knob acts like a brake and helps to keep the spool spinning at a relatively constant rate during casting. (Source 3)

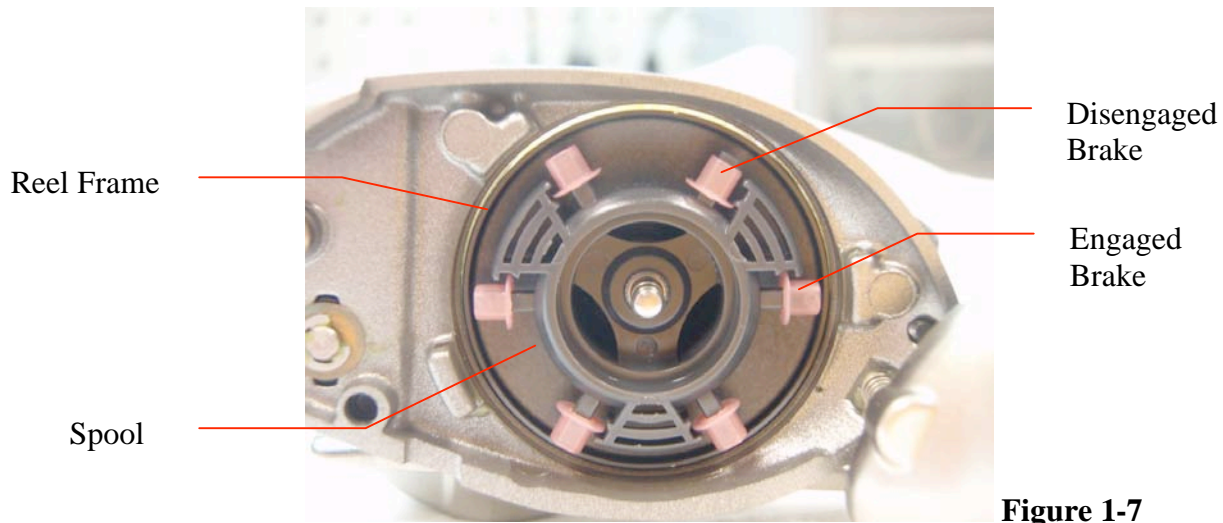
In addition to the friction control knob and your thumb, there is one more braking system used in a baitcaster that is not visible in the pictured diagram. This brake system, depending on which type, involves influencing the spool wall or the reel frame directly rather than the spool shaft.



Figure 1-6

This brake is found on the side of the reel opposite the handle. There are two different types of this braking system and their appearance varies with different manufactures, but both serve the same purpose. The first type uses a series of small plastic brakes that can be engaged and disengaged as needed. More brakes mean slower spool rotation while fewer brakes mean faster spool rotation. Keep in mind that with all braking systems, the tighter the brake the shorter the cast, but also the less likely a backlash will occur. Adjusting the braking systems is necessary to achieve the longest cast with no backlash. In order for this to happen, a happy medium between brake friction and cast distance must be achieved. The looser the brakes, the more you must use your thumb to control your spool. This system operates exactly like a drum brake on a car.

The small plastic brakes, when engaged, rub against the frame of the reel causing the spool to slow down. (Source 3)



To access this type of brake system, the side plate of the spool must be completely removed. Often times, a latch allows access to the braking system as shown in **Figure 1-8**.



Figure 1-8

The second type of braking system uses magnets that interact with the wall of the spool. By turning a small dial on the side of the reel, you can move the magnets closer or further away from the spool. The closer the magnets are to the spool wall, the slower the spool will spin due to the increased magnetic attraction between the magnet and the spool. The dial on the side usually has numbers that indicate the amount of force the magnet has on the spool. Lower numbers represent less force (more distance) while higher numbers represent more force (less distance).

Dial



Magnets

Figure 1-9

Pros and Cons

Now that you are familiar with how the baitcasting reel works, let's point out the pros and cons of operating the baitcaster.

As you can see by the two different brake systems on the reel, controlling the spool is critical to proper operation. Most people that don't like the baitcaster complain about backlashes and having to adjust the brakes for each lure. One could see how having to adjust your reel to cast better could be an inconvenience, but it can also be an advantage. Many people who dislike baitcasters have not spent a lot of time using them. It takes a little bit of practice to really master one. After a while, your thumb will develop muscle memory and will be able to react quickly to changes in the spool's speed. The better you get with your thumb, the looser you can set your brakes and the further you can cast. Also, with baitcasters the brake systems can allow you to cast in high wind conditions and cast lightweight lures. This takes practice, however, and people who pick up a baitcaster for the first time won't be able to operate it very well. This is the main reason why baitcasters are in the minority in the fishing community. Few have the patience to master them.

Another reason why people say they don't like the baitcaster is because of the mid-cast hand change. When casting a baitcaster, you use your right hand to grip the reel and your right thumb to slow the spool. Your left hand grips the bottom of the rod for more casting power. When it is time to retrieve, however, your left hand must come up to grip the reel and your right hand must move over to turn the handle. This all happens as the lure is still flying through the air. One again, this takes time to master and will eventually become second nature.

One main advantage to using a baitcaster is the ability to stop the spool mid-cast with your thumb. If you have a bad cast and your eight-dollar lure is headed for the bushes, you can quickly stop it with your thumb. Even in non-emergency situations, the ability to stop the lure exactly where you want to can be very valuable when fishing docks, heavy structure, and sight casting. However, you must stop your lure as soon as it hits the water or else the spool will continue to rotate and your line will get tangled.

Possibly the baitcaster's greatest ability is to cast heavy strength line with no adverse affect on casting distance. The heavier the fishing line, the thicker the line must be. Thicker line often has more memory and is prone to kinking. Because the line is simply pulled off of the spool, line thickness doesn't significantly affect the baitcaster's casting performance.

Because a baitcaster requires the spool to spin at a relatively constant speed, there is always an amount of tension on the lure during casting. This tension keeps the lure facing one direction and reduces lure tumble. Lure tumble occurs when a lure tumbles end over end during a cast. This can result in the fishing line becoming wrapped around the lure and making it worthless for that cast.

As far as pricing goes, baitcasters range from as little as \$30 to over \$600. Baitcasters from \$30 - \$90 usually have a short life span. These reels have low quality components and wear out quickly. Most baitcasters over \$90 however jump up a level in terms of quality and dependability. The difference between a \$90 baitcaster and a \$600 baitcaster is mostly materials and the amount of bearings. More bearings simply allow the reel run a little bit smoother. All in all to get a dependable baitcaster, you are likely to spend over \$90, but the difference between that one and one more expensive is not all that significant.

PROS	CONS
Ability to adjust brakes for better casting	Must adjust brakes for each lure
Ability to stop lure during cast	Easy to backlash
Cast heavy strength line easily	Mid cast hand change
No lure tumble	Inexpensive reels have very poor quality
	Takes patience and time to master

(Source 1)

Baitcaster Applications

While baitcasters can be used for almost any style of fishing, there are certain areas in which a baitcaster really shines. Forming an opinion of whether or not a baitcaster is better than a spinning reel depends a lot on what kind of fishing you do.

Because of its ability to use heavy strength line, baitcasters are more often used when fishing for large fish species like Musky and Tarpon.

Since most people have more strength with their right arm, baits that involve a lot of jerky movement or directional changes aren't typically used with a baitcaster. Since a baitcaster is held with the left hand, quick jerking movements are very awkward and exhausting. This makes baitcasters perfect for many crank bait style lures and slow retrieve, finesse baits. Crank baits are baits that are simply cast and reeled straight back. Reel companies capitalize on this by making baitcasters with many different gear ratios. This allows the angler to purchase reels specifically for their style of fishing. If one likes to fish fast moving baits, then one can buy a reel with a high gear ratio. On the other hand, if a slow, powerful retrieve is preferred, one can purchase a reel with a low gear ratio.

The baitcaster's ability to stop the lure mid-cast makes it perfect for a style of fishing called "flippin". Flippin involves short, accurate, underhand casts in which the lure is meant to go underneath docks, into heavy cover, or to a very specific location. Because the spool of a baitcaster must spin at a relatively constant rate, it makes skipping baits underneath docks impossible. To skip, a lure it must hit the water, experiencing erratic deceleration as it skips into the air. A baitcaster is not capable of this type of deceleration; so learning to "flip" it under docks is a very popular application with a baitcaster, particularly in bass fishing.

The Spinning Reel

The spinning reel is clearly the most popular in the fishing world. The spinning reel is relatively easy to use so when first learning how to fish, you will most likely be handed a spinning reel. This is why most people prefer the spinning reel; they grew up with one and found it simple to use.



Figure 1-10

This is the spinning reel. The spinning reel works by winding line onto a stationary spool and letting the line unwind freely during the cast. The spinning reel hangs below the rod and the handle is turned by your left hand as shown in **Figure 1-11**. The spinning reel requires a specific kind of rod. This rod will have larger line guides and no lower finger grip. (Source 4)



Figure 1-11

The Breakdown

Figure 1-12 is a breakdown of the spinning reel's key components and their definitions.



Figure 1-12

Spool: The spool is the large cylinder in the front of the reel. The spool contains the fishing line but does not rotate during the cast or retrieve. During retrieve, the spool oscillates forward and backward and the bail spins around it to allow the line to be distributed evenly around the spool as shown in **Figure 1-13**.



Figure 1-13

During a cast, the fisherman opens the bail and the line simply slips off of the spool as the lure pulls it through the air as shown in **Figure 1-14**.

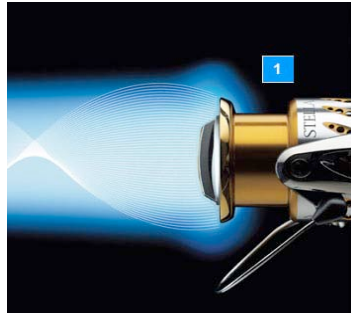


Figure 1-14

Bail: The bail is a thin, metal wire that rotates around the spool during retrieve. The fishing line runs through the line roller, which is attached to the bail. As the bail rotates, the line is wound back onto the spool. To cast, the bail lifts up just slightly more than ninety degrees. This allows the line to become free from the line roller and to unwind freely. **Figure 1-15** illustrates the bail in casting mode compared to retrieve mode.

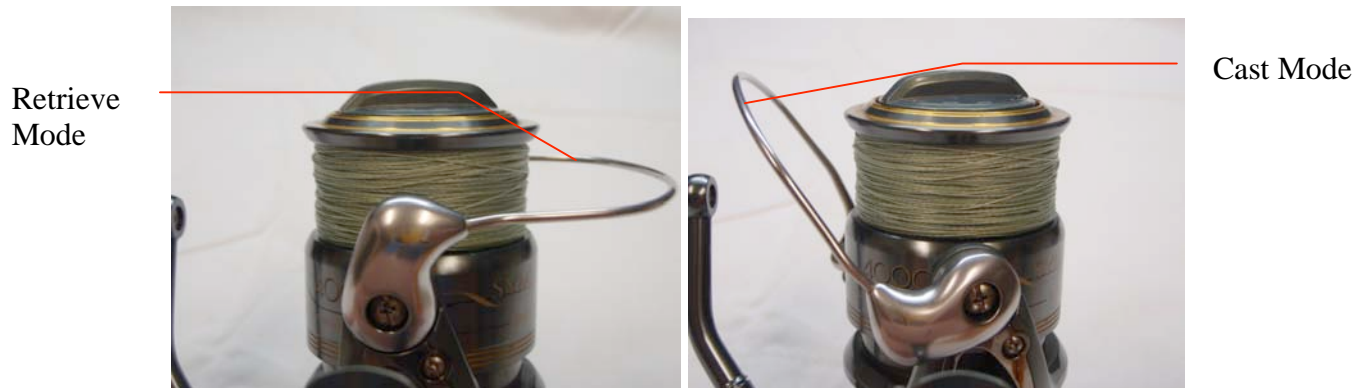


Figure 1-15

Line Roller: The line roller is a small ball bearing attached to the bail. The fishing line runs up off of the spool and underneath the line roller. The line roller smoothly winds the line back onto the spool during retrieve. (Source 4)

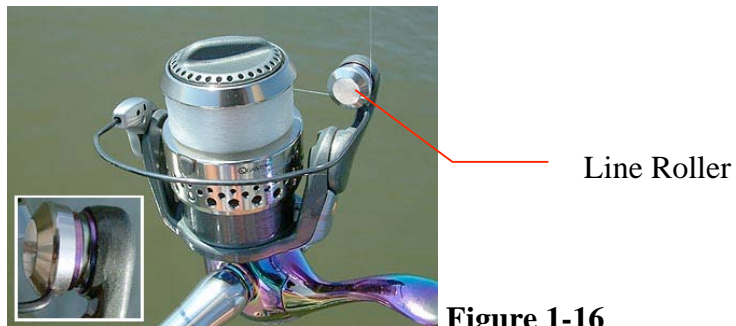


Figure 1-16

Handle: The handle is rotated forward in a counter clockwise rotation by your left hand. This rotation causes the spool to move forward and backward and the bail to rotate around the spool.

Drag Knob: The drag knob is a circular screw cap on the very top of the spool. By turning this cap clockwise one tightens the drag. The drag on a spinning reel works by allowing the spool to spin and dispense line when a sufficient force such as a large fish applies enough tension. There are two different types of drag systems on a spinning reel and their appearance varies among manufactures. The first type of drag is called the front drag. This is the drag used on the reel in the pictured diagram on the left. Front drag places the drag knob on the front of the spool. The second kind of drag is called rear drag or fighting drag. Fighting drag places the drag knob on the very back of the reel. Front drag is the more common of the two.



Figure 1-17

Pros and Cons

Now that you've seen how the spinning reel works, let us take a look at its pros and cons. Probably the biggest advantage of the spinning reel is that it is user friendly. To operate the spinning reel is quite simple and just about anyone, regardless of age, can learn to use one in a matter of minutes. Because the line simply unwinds off of the spool during the cast, there is no need for complicated braking systems or manipulation with your thumb. When casting a spinning reel, you are basically using the weight of the lure to unravel the line. Because of this, when using a lightweight lure, you can compensate for its weight with a more powerful cast. This way you can cast lightweight baits effectively.

Another distinct advantage of a spinning reel is the ability to skip your lure. Since it doesn't matter how fast the line comes off of the spool, the lure can experience erratic deceleration with no adverse affect on the cast.

When using a spinning reel, the rod is held with the right hand. This creates a very natural and powerful feel for the rod. Manipulating baits that require jerky motions and directional changes is very easy to do with a spinning reel. It also gives the angler more power when fighting a fish. (Source 2)

A disadvantage of the spinning reel is that it is quite difficult to stop the lure mid-cast. Because the line is unraveling freely from the spool, one must reach around the reel and grab on to the rapidly moving line to stop the lure or quickly turn the handle to reengage the bail.

One of the main disadvantages of using a spinning reel is that when the line is wound back onto the spool during retrieve, it is constantly being twisted. As the line goes under the line roller it undergoes a change in direction. In addition to this, the line roller is constantly spinning around the spool. Between the direction change and the rotation of the line roller, the line develops a slight twist. When the line has twisted too much, it has a tendency to develop a tangled mess during the cast. This is often referred to as a "bird's nest".

Another disadvantage is that heavy strength fishing lines do not cast well with spinning reels. They are too thick and have too much "memory", meaning that when the line is taken off of the spool it remains in a circular spiral. This negatively affects casting because the line doesn't flow as freely off of the spool.

Because the line unwinds off of the spool freely, there is no tension on the lure during a cast. This often results in the lure tumbling through the air and becoming tangled in the fishing line.

One other small disadvantage of the spinning reel is that to adjust your drag while fighting a fish, you must reach around the front of the reel with your left hand or switch the rod to your left hand and adjust it with your right. This can be very awkward and confusing while fighting a fish powerful enough to pull out your drag.

The pricing of a spinning reel can be as little as \$15 to over \$700. The cheaper spinning reels (between \$15 and \$90) tend to be of decent quality and last quite a long time. The more expensive spinning reels will have better materials and more bearings and

might last a little bit longer. All in all, you can buy a very decent spinning reel for under \$90.

Pros	Cons
Very easy to use	Hard to stop lure mid-cast
Easy to skip lures	Line gets twisted and can tangle
Casts light weight lures easily	Poor casting with heavy lines
Cheap spinning reels are often of good quality	Awkward drag adjustment while fighting fish
Natural right hand feel	Lure tumble

(Source 1)

Spinning Reel Applications

Spinning reels are very popular in all different types of fishing. However, there are certain types of fishing for which a spinning reel is most ideally suited. Because the spinning reel does not cast heavy lines well but does cast light lures well, spinning reels are often used in a style of fishing called “ultra light.” This style of fishing involves a small reel, light line, and a small lure. This style of fishing is commonly used to catch trout, blue gill, crappie, and small bass. (Source 2)

Because the spinning rod is held with the right hand, baits that involve quick jerks and directional changes are ideal for spinning reels. These baits are called “jerk baits” and are very fast, erratic baits used to simulate a wounded minnow. The natural strength of the right arm makes using these baits very easy and comfortable.

A unique feature of the spinning reel that lends itself to almost any type of fishing is that spinning reels are often made in many different sizes. The different size reels have different spool capacities and different overall size. If you were fishing for larger size fish, you could purchase a larger size spinning reel that will hold more line and cast heavy strength line. The fact that you can purchase a reel in a size specifically suited to your type of fishing makes the spinning reel applicable to almost any type of fishing.

Figure 1-18 shows the same make and model of a spinning reel but in three different sizes.



Figure 1-18

Baitcaster vs. Spinning

Now that you are well acquainted with how both reels work and what they are most often used for, we can compare them head to head to better help you decide which reel is better. We will be comparing both reels in a series of different categories to see how well they stand up against one another.

Castability

Castability is probably the biggest argument between baitcaster enthusiasts and spinning reel enthusiasts. As a general statement, spinning reels are easiest to learn how to cast. Baitcasters take some time to perfect but because of the brake systems and ability to manipulate your cast with your thumb, baitcasters can produce a more accurate cast and a cast that requires less energy. With a spinning reel, casting distance depends on how hard you cast. With a baitcaster, the reel does most of the work and a light cast can still produce a cast of significant distance.

In windy conditions, spinning reels are generally easier to control. You can compensate for strong winds with a harder cast. With a baitcaster, you may have to apply more brake and thumb the spool a little bit harder. Wind makes casting a baitcaster very awkward because the line isn't leaving the spool at the same speed it usually does during calm conditions so a lot of adjusting is required. Generally, windy conditions lead to more frequent backlashes for baitcasters.

When throwing lures of different weights, baitcasters and spinning reels have their strengths and weaknesses. Let us compare a light lure to a paper ball and a heavy lure to a brick. To achieve maximum distance, you would want to throw the paper ball with a quick, powerful whip of your arm. With the brick, however, to avoid injuring your

arm, you would want to use a very slow, powerful throw. When casting light and heavy lures, the same rule applies. When using a bait caster, casting light lures can be very difficult. Because you must use a quick cast, the spool goes from a stand still to a very fast rotation in a short period of time. This can be hard to control with your thumb and can often result in backlashes. Casting heavy baits with a baitcaster is a much easier task. Since the cast is very slow, you have a lot of time to react to changes in the spools rotation. This allows you to loosen the brakes and achieve a long distance cast with little backlash worries. When using a spinning reel, casting lightweight lures is not typically a big problem. You can make up for the lure's lack of weight with a more powerful cast. Heavy lures however can be somewhat awkward to cast. When using a spinning reel, you almost always use a very quick cast but with a heavy lure you cannot do that or your rod may snap. Having to slow down the cast often results in the lure flying very high up. This makes your cast very inaccurate and it creates a loud splash when the lure hits the water. This may spook fish in your area.

Retrieve

Other than the fact that you reel a baitcaster and a spinning reel with different hands, the retrieve is very different between the two. When you retrieve a baitcaster, you simply turn the handle and the spool rotates, but because the spool is so lightweight, it is very easy to detect misalignments in the reel that may cause it to grind or feel unsmooth. Because of this, the number of bearings in a baitcaster is very significant. The more bearings in the reel, the smoother the retrieve will be. Unfortunately, more bearing means a more expensive reel. A spinning reel's retrieve however, involves spinning the bail around the spool, which is moving backward and forward at the same time. Obviously when retrieving, the person using the reel is going to feel more weight on the handle. This helps to dampen any vibrations in the reel that may cause the reel to feel unsmooth. Because of this, spinning reels do not require as many bearings as a baitcaster to produce a smooth retrieve. This is why relatively inexpensive spinning reels can feel very smooth and last a long time.

Durability

Durability in a fishing reel is probably one of the most important qualities to insist upon. More expensive reels are going to have better components and generally will last a long time. You can purchase cheaper reels that sacrifice smoothness for durability but to

have both is ideal. Because of the way baitcasters are designed, they are a little more prone to damage than a spinning reel. The baitcaster has many large surfaces that are left unprotected and susceptible to scratches. The large side plate and the top of the reel are the areas most prone to damage. Although scratches do not affect the reel's performance, they don't look attractive are not covered by the warranty. On each side of the reel, side covers protect the inner workings of the reel. If the side covers are not sealed well, water can become trapped inside the reel and cause significant damage to the reel's inner components. Spinning reels are a little better equipped when it comes to water protection. Because most of the inner workings of the reel are exposed only by removing the spool, the spool acts as a big umbrella for the reel's inner components. However, the fact that the spinning reel has several large components protruding from it such as the handle and the bail, these parts are very susceptible to being bent or broken. On the other hand, since the spinning reel has few large, exposed surfaces, it is less likely to be scratched.

Conclusion

Whether or not you are thinking about taking up fishing as a hobby, buying a new reel, or interested in switching from one reel style to the other, this information can be very valuable in your choice of buying a baitcaster or a spinning reel. Before deciding, ask yourself, what kinds of fishing you will be doing? How much are you willing to spend? Do you have the patience to learn how to use it? Do the pros outweigh the cons? Maybe a spinning reel fits your style of fishing perfectly or maybe a baitcaster is better suited for your favorite style of fishing. If you're like me, you may choose to master both. Before giving up on one to the preference of the other, I highly recommend that you get your hands on both a spinning and baitcasting reel and really spend some time using them. Only then can you make a fair decision on which reel is truly best.

Works Cited

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Illustrations

Fig. 1-4

<http://www.kayak4redfish.com/images/bird-nest-01.jpg>

Fig.1-5

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Fig 1-14

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Fig 1-18

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