

Buying Your First Tractor

Great Plains Kubota

Your back is tired and your hands are sore. Everything is growing up around you and you just don't know how you will ever catch up. Your dream of owning a small acreage is starting to look a lot less attractive. You know your life would be easier if you had a tractor but you're not sure where to start or what you need. The first thing that many people do these days is to look on the Internet. After several hours of searching, clicking, and reading, you're probably more confused than when you started. All these tractor terms, models, and sizes have your head spinning. What does all this stuff mean: live PTO, hydraulic independent PTO, mechanical independent PTO, constant mesh transmission, FST, GST, HST, compact, sub-compact, and utility? How can I possibly pick the right tractor?

At Great Plains Kubota we help our customers find the right tractor by removing the confusion about the terms, then fitting the equipment to their needs. The first step toward finding the right equipment is to take a good look at your property and what you want to get done with a tractor. When it comes to tractors, bigger is not always better, but we do find that a lot of our customers come back saying that they wish they had bought a larger tractor. Because a tractor is an investment that most customers will keep for a much longer period of time than a vehicle for instance, be sure to buy enough tractor. Spending a little more for a larger machine could pay big dividends in time saved and satisfaction. On the other hand, if you have a lot of tight maneuvering, a smaller machine can save you more time than a larger one.

A Typical Scenario

Let's start with a typical scenario. You have 10 acres of land that is mostly flat with a small pond. There is one acre of lawn around the house that you want to keep well groomed. You also have a couple of acres that you want to keep in field/pasture, but you would like to keep that cut down and looking neat. You have about 300-400 yards of gravel drive that you want to keep maintained and you might even want to plant some deer food plots on your deer lease during the fall or plant a garden in the spring. We can now take each area one at a time and determine the equipment that works best to maintain it.

Lawn

Since we want to keep the acre around the house well mowed, we need to look at some mowing options. The main thing to consider is the amount of maneuvering that is required. Is the acre around the house open, or does it have a lot of shrubs and flowers? If the area is open we can go with a 5' or 6' wide cut. On the other hand, if we need to do a lot of maneuvering, we would want to stay with a 4' or 5' wide cut. If the area has a lot of tight maneuvering a mid-mount mower will make the task easier because it is more compact. But, if the area has some ditch banks, ponds, creeks, or low trees/shrubs, the rear mount will work better. The rear mount enables you to back the mower under low vegetation or out over a pond to keep those areas neat with less hand-work.

If a rear-mount mower is chosen, there is also an option of side discharge or rear discharge. Side discharge gives you a cleaner, more vacuumed cut and allows you to move leaves in the fall. Rear discharge gives you clean sides to trim from, and will cut taller grass without leaving a windrow. For our scenario we will choose a 5' rear discharge grooming mower because we have the edge of the pond to mow, and the flower and shrubs are well spaced out in the yard.

Field

Next, we need to look at the 2-acre field/pasture. How nice of a cut do you want on this land? Most people will use a rotary cutter to keep a field cut down, but if you are looking for a more groomed appearance, you can use a rear discharge, grooming mower. If you set the wheels up high on the mower it will give you the same height cut as the rotary cutter, but a lot cleaner cut. The rear discharge will also spread the grass out evenly and not windrow. However, the grooming mower cannot handle tall grass as well as the rotary cutter, so you need to mow more frequently. For our scenario, we will use the 5 grooming mower chosen earlier to keep the field cut.

Driveway

Now let's look at the driveway. If the driveway is flat, a rear blade will do a good job keeping the gravel shaped up, and it can also be used to move snow. If the driveway is on a hill, a grader box will work better for pulling the gravel back up the driveway when it washes off. In this example, we have a flat driveway, so we are going to use a rear blade. To determine the proper blade size, we will measure the width of the tractors rear tires and add a foot to get proper length. By adding a foot to the tire width, you will be able to cover your tire tracks when the blade is angled.

Woodland

The final area of our property is the 5 wooded acres. A lot of people like to keep the underbrush down in an area like this. To handle the underbrush, we need to use a rotary cutter. Rotary cutters come in different grades; standard, medium, and heavy. A standard duty cutter will handle material up to 1" in diameter. This is usually enough for most peoples needs. You also have a choice of shear bolt or slip clutch drive shaft. A shear bolt works well when you're cutting mostly grassy material, but if you are going to cut heavier material, a slip clutch is preferable. If the blade on a shear bolt rotary cutter hits a large object, the shear bolt will break to protect the PTO and tractor from damage. When the bolt breaks, you need to replace it to continue mowing. So, if you use the cutter in an area where there are a lot of large objects, a slip clutch will prevent you from having to replace the shear bolt frequently. In our scenario, we will choose a 5' rotary cutter with a slip clutch to keep the wooded area clean. The rotary cutter will also help in the pasture if the grass gets up and too heavy for the grooming mower.

Deer Plots / Garden

Lastly, you may want to plant some deer plots on your place or a lease. One of the advantages of a tractor this size is that it can easily be towed to your deer lease by a half ton P/U or a large SUV. With the addition of a 5' three point disc or a 54" – 60" tiller to run off the tractor PTO, you can prepare your seedbed. The only other attachment that you would need to plant your plots would be a three point seeder. Additionally, if you decided to break out a garden in the spring, you would have the attachments to do it quickly and easily.

Consider PTO Requirements

The implements we have chosen for our scenario are a 5' rear discharge grooming mower, a 5' rotary cutter, and a 6' blade. Now we can choose the tractor that will make all of this work.

A lot of implement manufactures will list horsepower requirements for implements, but you need to make sure they are referring to PTO horsepower, not engine horsepower. PTO horsepower is the amount of horsepower available at the rear of the tractor where you hook up the implement. There is normally a 4-5 hp drop from the engine to the PTO shaft.

A good rule of thumb for matching your implements to the tractor is:

- 4' PTO implements require 16-25 PTO Hp
- 5' PTO implements require 20-30 PTO Hp
- 6' PTO implements require 25-40 PTO Hp

For the implements that we have chosen, we need a tractor with a 30-35 hp engine, or 20-30 PTO hp. This will put us in the compact line of tractors. If we had chosen smaller implements, we would be at the smaller end of the compacts or sub-compacts. On the other hand, larger implements would lead us to the larger compacts or utility size. Kubota offers several choices in the horsepower range that we have chosen. The three that I would recommend in this scenario are the B3200, L3800, and L3240. All three of these tractors are similar in horsepower, but are quite different in size.

The Tractor Models

The Kubota B3200 is a smaller frame 30 hp tractor that has 4-wheel drive and hydrostatic transmission. The hydro is very useful when you are doing a lot of direction changing and maneuvering in tight areas. The only disadvantage with a hydro is that you lose an additional 1.5-2 hp turning the hydrostatic pump.

The L3800 comes in two transmissions. The first is a standard gear drive with a constant mesh transmission. This is a good transmission if you are in open areas, but it can get tiring if you're working in tight areas. A constant mesh transmission requires you to stop the tractor completely when changing gears or directions. The second transmission available in the L3800 is the hydrostatic that was discussed earlier.

The final tractor we are considering is the Kubota L3240. This is the largest of the three tractors but it is still in our horsepower range. The L3240 is available in 3 transmissions. The first is a fully synchronized transmission (FST). This transmission gives 8 forward and 8 reverse gear choices with a shuttle. With the FST, the tractor can be shifted without stopping. The second transmission option is a glide shift transmission (GST). This transmission has 12 forward and 8 reverse gears with a shuttle. The clutch is not needed to shift up and down gears or shuttle forward/reverse. The third option on the L3240 is the hydrostatic. The hydro has three ranges with a rocker pedal in the floor for forward and reverse.

All of the tractors we are discussing have a live PTO. A live PTO means that the direction or speed of the tractor can be changed without stopping the PTO. There are several ways that manufacturers can implement live PTO. The first is to use a two-stage clutch. The two-stage clutch allows you to push the clutch pedal down half way and stop the tractor, but the PTO continues to turn. The second way is to use a hydraulic clutch pack. This is called a hydraulic independent PTO. It is used in shuttle transmissions where the clutch is needed to shift. The third live PTO implementation is called a mechanical independent PTO. This is normally found on tractors that have a hydrostatic transmission where the clutch is used to engage the PTO and travel is controlled by the foot pedal.

Our Choice

For our scenario, we will choose the Kubota L3800HST. This tractor will give us enough horsepower to match the implements with a little extra to spare. The hydrostatic transmission will make maneuvering in the yard and in the woods easy. If we later want to add a front-end loader to the tractor, this style transmission will be very operator friendly. This tractor also has a cruise control, which will come in handy when we are mowing the pasture. The cruise control can be used to select a speed and hold it, without having to keep your foot on the pedal.

Buying the Tractor

One of the most important things about buying a tractor is to purchase it from a good, reputable dealer that is close to you. They should be a full-service dealer that can provide delivery, good service, and parts. The extras that come after the sale, such as going over how to do the 50hr service, how to hook-up and use your implements properly, and explaining how to operate the tractor will help you feel more comfortable and give you satisfaction with your purchase. Knowing that you have a full service dealership to stand behind you after the sale will give you peace of mind. The tractor that you are purchasing will be with you long into the future. You need a dealer that will be too.

Summary

The best way to ensure success when buying your first tractor is to look closely at your property. When you take the time to understand your specific needs, choose the implements that will work best for you, then match the tractor to the implements, you will have a much better chance of picking the model that works for you. If you then buy your tractor from a good, full-service dealer that is close to you, you will always have someone to go to when you need it. Enjoy your tractor and be safe.