Choices in Utility Vehicles

By Jim Williams

Most sport turf managers will someday shop for a utility vehicle. Utility vehicles (UVs) are just too efficient and versatile to ignore. Generally no bulkier than a large riding mower, a UV can drive into just about any area a manager can reach on foot or with a wheelbarrow, placing more people, equipment and supplies within easy reach of sport complex sites faster than almost any means other than an air drop.

UVs mean greater economy, saving labor costs and the cost of maintaining a variety of different specialty vehicles. This leaves you with more money for your turf and, in turn, means higher turf standards. What the tractor is to the farmer, the UV is to the turf manager, and the odds are you will eventually have to plow through the many models available and choose one.

Like it or not, the choice is yours. No one else knows your turf and your problems as well as you, and unfortunately, there is no single UV to fit all purposes. You must match the vehicle to its actual use in the field by making a precise list of your primary and secondary needs. For a comprehensive list, talk to your field personnel and consult other managers for advice and recommendations.

Once you've made a list of your needs, you're ready to focus on the UVs that will best fulfill them. You'll want to order detailed literature on specific vehicles from manufacturers and distributors. If at all possible, try to test drive a variety of UVs, both empty and full, or better still, see if some of your local dealers have demos they can loan for a couple of days. As you study the UVs, you will find that there are about six basic areas in which you'll have to make choices.

Hauling Capacity

This is the most basic area, for this is how utility vehicles are generally classified: as either (1) light-duty, capable of hauling around 500 pounds; (2) medium-duty, 1,000 pounds; or (3) heavy-duty, 2,000 pounds and up.

Light-duty units are good basic transportation models. Basic transportation can help perform such tasks as carrying irrigation parts and other equipment and supplies or serving as a mobile office. In basic transportation models, manufacturers offer lights, fuel gauges, hour meters, seating for two people, canopy tops and even hydraulic dump beds for hauling.

The light-duty category now includes a new generation of powered wheelbarrow/cart combinations. Derived from garden tractors, these come in walk-behind and rider versions (often with a sulky attachment). Some can move loads of 500-plus pounds over difficult terrain, yet aren't any more complicated than the average mower.

While light-duty vehicles have their applications, medium- and heavy-duty units offer more versatility and durability. These two classes, which are the norm for heavy hauling and for towing turf implements, are the types usually preferred at larger athletic complexes. Their initial cost is greater than a light-duty's, but their versatility saves you time and money.

Buying a heavy-duty unit for light-duty use is overspending. Just to move people around, you don't need to pay for all the multiple-use extras you'd find on heavy-duty vehicles. But it's even a greater mistake to use a light-duty vehicle for heavy-duty applications. Heavy loads, towing implements and power take-off (PTO) units strain UVs and will quickly wear out the lighter-duty vehicles.

Power Source

In this area, your first choice is whether to buy electric or combustion. In favor of electric engines is the fact that they are the quietest of all power sources and have fewer parts, so their maintenance is easier. Standard electric vehicles offer 36-volt systems and 2.5 hp motors, although 42-volt systems and 5 hp motors are available.

The main drawback to electric models is their limited range between battery charging. Consequently, most managers opt for combustion engines, which come in gasoline, gas propane and diesel models, with liquified natural gas on the immediate horizon.

Gasoline and diesel are the more common types, and between the two, diesel offers fuel savings of up to 50-percent, less maintenance and no ignition timing or spark plugs. Even so, gasoline models are preferred because fuel and servicing are more readily available.

In gasoline models, two-cycle engines have faded in favor of four-cycle units. Although two-cycle engines offer an economical option for vehicles that carry smaller loads, four-cycle engines are quieter, more durable under constant heavy use and better equipped to meet ever-growing emission-control standards. Likewise, between water- or air-cooled engines, water usually gets the nod. Air-cooled engines require less maintenance, but water-cooled power plants last longer because internal engine parts don't wear out as quickly.

Regardless of what type of engine you choose, the key is to make sure it has sufficient power to pull or operate your equipment. It must have power to do jobs when the vehicle is fully loaded and the torque to climb hills as well as get over curbs. For heavy hauling and towing implements, a UV's higher speeds are of secondary consideration; primary is good response at lower speed ranges.

The manufacturers' literature you receive will provide this information, containing specification sheets that list a vehicle and engine's rated capacity. Try to determine if the capacity includes one or two people; if only one, subtract 200 pounds from the hauling capacity if you send out crews in twos. You might also see if the literature mentions a "ground speed governor," a standard feature in many heavy-duty utility vehicles. When towing an implement like a spreader, the governor keeps the vehicle's speed consistent when driving over undulating terrain, which allows uniform distribution of materials. This saves time and money.

Maneuverability

In this area, you first decide whether a three-wheel or four-wheel model is more appropriate to your needs. Three-wheelers are categorically more maneuverable, but four-wheelers can haul more cargo and are more stable, an important factor on uneven or hilly terrain.

Maneuverability is also determined by the vehicle's steering and suspension systems, as well as its length and wheelbase. Wider wheel bases are more stable and tend to be more maneuverable.

The best way to determine a UV's stability and maneuverability is to test drive it. See how it feels when you make

a sharp turn at 10 to 15 mph. If it sways significantly while unloaded on flat ground, it's likely to roll over when fully loaded if a driver swerves to miss something.

For suspension, you'll want a system that allows adequate ground clearance and won't let the UV sag too much under a full load. Consider hydraulic shock absorbers, which are adept at smoothing out bumps. For steering, consider a rack-and-pinion system, which provides a tight turning radius.

Body and Frame

A UV, especially a heavy-duty one, should have a frame that can withstand the most grueling punishment. Notice the gauge of steel used in construction and if the frame is welded or bolted together. Welded "unitized" frames are preferable. Durability increases with the addition of rust- and corrosion-proof materials, especially for frames and cargo boxes. Injection-molded plastic components can enhance durability and appearance. Vehicles with rust- and corrosion-proof materials have higher trade-in values and can lower long-term operating expenses.

Serviceability

How do you purchase serviceability? Buy a brand with a service department in your area. Also, buy a model that makes self-servicing as easy as possible. In other words, when deciding on a UV, consider design simplicity and accessibility of areas that need servicing. Maintenance like changing oil, oil filters, cleaning air filters, tire pressure and so forth can be done in-house.

For some servicing, however, you'll need to take the UV to a dealer's service department, so consider how conveniently it's located and its reputation for providing quick, reliable service. When looking at UVs, also check out the vehicle's warranty and cost of service contracts.

Safety and Operability

UVs get used hard, and not always by the most knowledgeable or skilled workers. Therefore, to help part-time operators, some models have controls familiar to anyone who can drive a stick-shift pickup.

In general, less-complicated vehicles that require less gear shifting are easier to operate, so people are less likely to make mistakes and are thus safer. Controls should be easy to reach when the UV is in motion, so drivers have no difficulty maintaining control. Now, most UVs use automatic transmissions since they are usually hydrostatic drive. Gas, brake and steering wheel are all the controls you normally use.

There are many other possible safety features you'll want to consider. For instance, today's UVs include the following options: reverse warning beeper, front grille guard, rear fenders, roll bar, restraining cage, revolving amber roof light, spare tire and wheel, spark arrestor, hazard warning flashers, seat belts, tail lights, stop lights, electric horn, mud flaps, and emergency power on-off button. Some manufacturers also offer the necessary equipment for making a UV street legal should you want to operate it on public roads.

Outlined above are but a few of the choices you face when you shop around for a utility vehicle. You'll run into many more as you peruse catalogs and cruise show rooms. You'll also see various options for handling weather conditions, different types of transmissions, and tires of various widths and pressures, to name a few. It seems like there's something out there to meet every turf manager's needs. ❑