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Ronald C. Smith Extension Horticulturist Staci Wesbur Horticulturist

egular mowing of the lawn will be the most continuous chore during the summer months for North Dakota homeowners. The variety of lawn mower models and the degree of sophistication, along with the range of prices, is almost bewildering to those currently in the market for a new mower. This circular will review the mower models available to help the buyer make the right decision on what can be an expensive purchase.

With regulations governing emissions, noise, and safety, the mower you purchase today will little resemble what was available on the market in the early '90s.

The Simplest – Hand Pushed Reel Mowers

These are mowers that cut with a scissors-like action. The reel pulls the grass blades into the bed knife where a clean, neat cut is made. These mowers are most effective on grass that is maintained at 1.5 inches or less. Lacking an engine, they require no fuel or oil and are rated as the safest, most environmentally sound mower to use. In addition, they are the greatest calorie burners for the user, a plus for those who are looking to get extra exercise into their regular routine.

While they will follow the contours of the lawn better than a rotary mower, using a reel mower on tall

grass will result in a flattening out rather than a good cutting. A big plusthey generally run around \$100 for a quality unit.

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A Giant Step Up In Price – Self-Propelled Reel Mowers

There are two types: the models that discharge the clippings to the front, and those that discharge to the rear. The front discharge models are usually used on greens and tees on golf courses where a clipping height of creeping bentgrass is maintained at 0.25 inch or less. From a homeowner standpoint, they are not practical, and they are expensive, costing up to \$4,000 for a quality model.

The rear discharge models are not as sophisticated, having only a 5-bladed reel (as compared to a 9- or 11-bladed reel for the front discharging models). Because of this, they are not used for high quality mowing, generally being confined to general purpose mowing of cool-season grasses.

Neither model is readily available in the marketplace for homeowners.

Most Popular – Walk Behind Rotary Power Mowers

Here, an engine does the mowing and, in the self-propelled models, the forward propulsion as well. The typical engine is gasoline powered, ranging from 4 to 6 horsepower, with a mulching, bagging or side discharge capability. The least expensive models are around \$125 and come with a pull-rope start, while the more expensive ones top out at close to \$600, with an electric start plus all the available features. Generally, mowers of this

homeowner would be wise to invest in one with all the options available, as there may be times when bagging would be desired.

Relatively new on the market are the rechargeable battery-powered electrics. Their power units are recharged overnight when plugged into a standard electrical outlet, and can deliver

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from 45 to 90 minutes of power at a continuous speed on a single charge. Their decks are made of high impact plastic, so there is no possibility of rust. The batteries are either 12 or 24 volt and will last five to six years with normal use before replacement is necessary.

Their big advantages are ease of starting (no cord to pull!) and silence of operation, allowing the chore of mowing to be unobtrusively carried out in the early morning or late evening hours. Expect to pay \$300 or more.

A new twist on the self-propelled mower is one that will mow at the particular operator's own walking pace, up to 4.5 mph. If the mower is going through tall or heavy grass, the operator can go slow, and in areas where the grass isn't as long, the pace can be stepped up. In addition, the choke and throttle are often eliminated on these models, with a rubber push button being pushed to prime the engine and the engine running at a set RPM for all mowing operations.

The mowers discussed to this point are intended for lawns that range from about 5,000 to 12,000 square feet. On areas significantly larger that this, especially where there are large areas of open turfgrass, one of the following mowers may be more practical.

Riding Mowers, Lawn Tractors, and Garden Tractors

Riding mowers are popular with homeowners who want to get the job done without spending a great deal of time or effort on the task of mowing. They are maneuverable, have a tight turning radius, and ample power to carry a 200-pound operator easily. Their engine size runs from 8 to 13 horsepower, with mowing decks that are up to 42 inches wide. Prices can range up to \$1200 or more.

Lawn tractors are larger units, with less maneuverability, and should be used where tight turns are not going to be a necessity. Often the manufacturer will sell optional attachments like tow carts, mulcher conversions, bagging attachments, and tow-behind aerifiers. The homeowner is better off opting for the more powerful engine unit, especially if the desire is to utilize the optional equipment. Prices can run up to \$4,000 or more.

Garden tractors are the most universal units for homeowners who are involved with large properties to manage. They can be used for mowing, either gang reels, or power-take-off (PTO) rotaries, and have attachments

that include chippers, rototillers, snowblowers, and tow carts. Their mowing width is as high as 60 inches. Expect to pay up to \$6,000 for these complete units.

When considering a purchase of one of these three units, compare frames, axles, transmissions, and efficiency of interchanging optional units. Test drive them like you would a car, realizing that many hours will be spent on them, so a comfortable seat is imperative. Accessibility to controls, lack of vibrations, and noise level should all be a part of the considerations.

Safe And Sensible Lawn Care

Turfgrass should be mowed high – 2.5 to 3.0 inches to look best and require the lowest input of water, nutrients, and pesticides. The mowing pattern should be altered to get the grass to grow without a grain and as thick as possible. If the grass can be mowed at the end of the day, it will have the cool of the evening hours to recover, rather than the heat of day from a morning mowing. Make the last mowing of the year, usually in mid-October, about 1 inch shorter, to help cut down on overwinter damage from snow mold and vole activity.

Try to recycle the clippings to the turf as often as possible. These clippings are a mulch which contribute to the softness of the lawn (not thatch), return nutrients, and save time and energy. Make your motto:

"Mow it tall, and let it fall."

Keep in mind that gasoline-powered garden equipment such as mowers account for 5 percent of all U.S. air pollution, so keep your mower tuned up. The cleanest mower to use, of course, is the push reel, followed by electric, then gasoline engines with overhead valves, to gasoline engines with side valves. The dirtiest engines are two-cycle, where gas and oil are mixed, usually in a 40:1 ratio, and contribute the most to air pollution.

Try to opt for little features that will make the task of mowing less fatiguing whenever possible. Padded handles, adjustable height handles, electric starters, quiet operation, and a deadman switch that stops only the blade when the hands are off the handle. The air filter should be located where it will be easy to remove and clean. Also note where the discharge plug is located if you are planning to change your own oil. Many are very inconvenient to reach. Be sure to get your blade sharpened at the beginning of every mowing season.

Try to select a mower that will provide you with all the safety, comfort, and dependability in the price range desired.



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