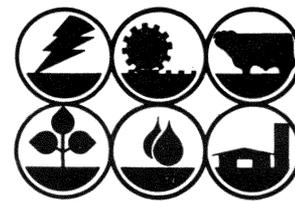


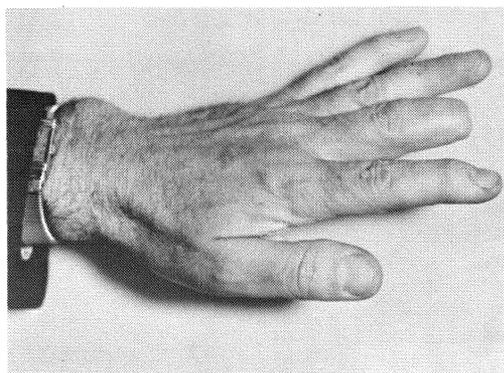
Lawn Mower Safety



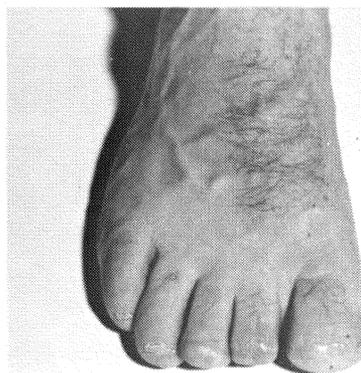
Agricultural Engineering



Power lawn mowers are time and labor savers in maintaining a well kept lawn but if improperly operated can be dangerous. Be careful!



Index finger permanently damaged and middle finger cut off by a revolving blade while adjusting a mower with the engine running.



Tips of three toes cut off when the operator's foot slipped under a rotary mower while he was mowing wet grass on a slope.

Extension Division
Virginia Polytechnic Institute and State University

LAWN MOWER SAFETY

Prepared by

Easley S. Smith, Extension Specialist, Agricultural Engineering

Power lawn mowers are labor-saving machines that have done much to improve our surrounding landscapes. Almost every homeowner has one, usually a rotary-type mower with blades that revolve at speeds between 1,800 and 3,000 revolutions per minute. This means the cutting edge of a 20" blade is traveling at speeds between 100 and 180 miles per hour. Imagine what would happen if a person were struck by a steel blade traveling that fast, or by a stone or piece of wire thrown by the blade.

Along with the increased use of power lawn mowers, there has been a closely related increase in accidents involving both operators and bystanders. Most of the accidents have been caused by carelessness or lack of knowledge on the part of the operator.

Numerous surveys have shown that approximately 2/3 of all injuries are caused by direct contact with mowers and 1/3 by objects thrown by

mowers. Most of these injuries have been to fingers, toes, feet, and legs, and involve the revolving blade either directly or indirectly. Short pieces of wire 2" or less are one of the most frequently thrown objects causing injuries. As riding mowers become popular, an increasing number of them are becoming involved in the more severe accidents.

The following suggestions on how to operate your lawn mower safely may be of great value if properly observed:

1. Be familiar with your lawn mower and follow the manufacturer's instructions.
2. Always disconnect the spark plug wire and be sure the blades have stopped before working on mower. This is especially important when putting your hand under the mower or when sharpening and making blade adjustments.

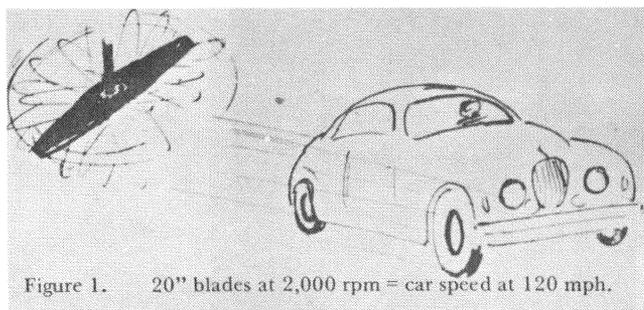


Figure 1. 20" blades at 2,000 rpm = car speed at 120 mph.

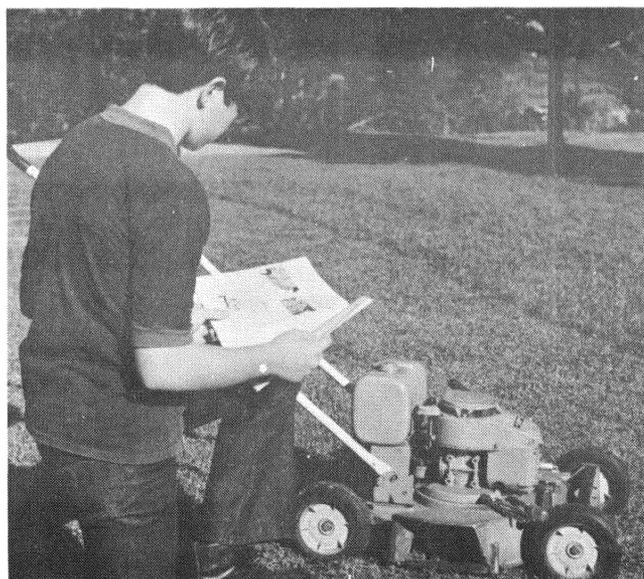


Figure 2. Read and study the operator's manual.

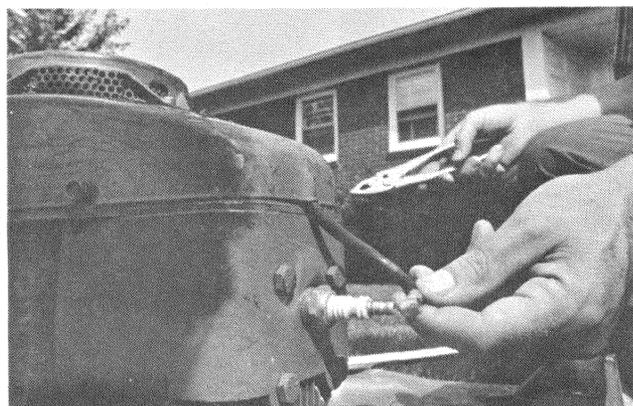


Figure 3. Disconnecting spark plug wire.

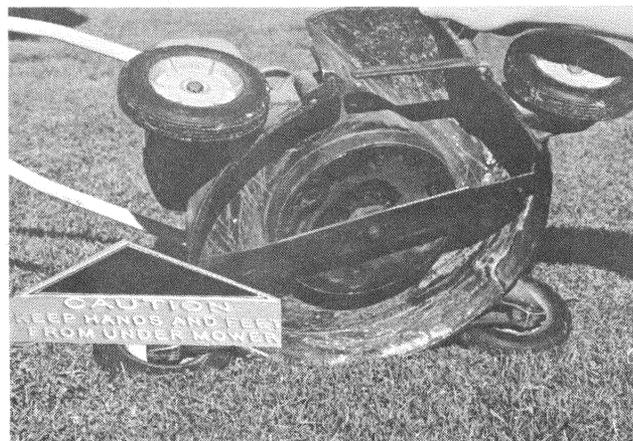


Figure 4. Underside of mower showing shield around blade and discharge chute. Inset - Safety triangle shows that mower conforms to safety standards of Outdoor Power Equipment Institute.

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3. Keep the mower clean and the blade sharp. Wipe off excess grease and dirt and check the blade before each use to be sure all nuts are tight. A sharp blade does a better job of cutting and requires less speed and power.
4. Make sure your mower is equipped with the necessary safety shields and never operate it unless these shields are in place.
5. Before mowing on rough terrain, set the blade high to prevent it from striking the ground. Keep blade high enough to prevent damage to the turf. Usually a minimum blade height of 2 1/4" is required.



Figure 5. Refuel before starting mower.



Figure 6. When starting engine, mower may be steadied by placing foot in a safe position on machine.

6. Store gasoline in an approved metal container away from furnaces, fires, or sparks. Do not store in a glass container.
7. Do not refuel tank when the engine is hot or running. A hot exhaust can ignite gasoline as well as cause severe burns.
8. Use care in starting your lawn mower engine
 - (a) Make sure self-propelled and riding mowers are out of gear.
 - (b) Stand firmly and keep hands and feet away from cutting blades and moving parts.
9. Use slowest possible blade speed consistent with good performance. High blade speeds are more dangerous and cause excess wear of mower.
10. Be familiar with the area to be mowed. Check for hidden holes, stakes, stumps, and other fixed objects. Remove toys, stones, sticks, wire, glass, and other trash from lawn before mowing. Remember, a blade traveling at 150 miles per hour can knock an object several hundred feet, causing serious injury or damage to anything in its path.

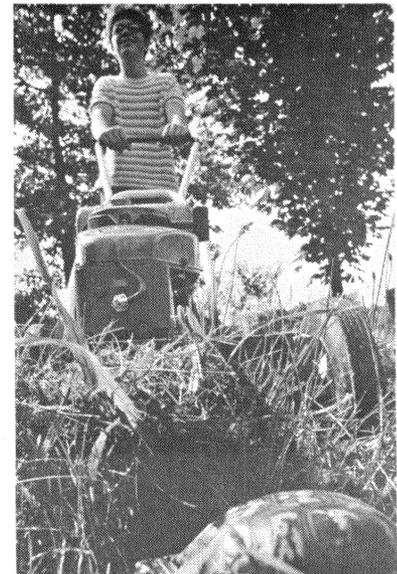


Figure 7. Objects, such as pet turtle, are sometimes hidden from operator's view.

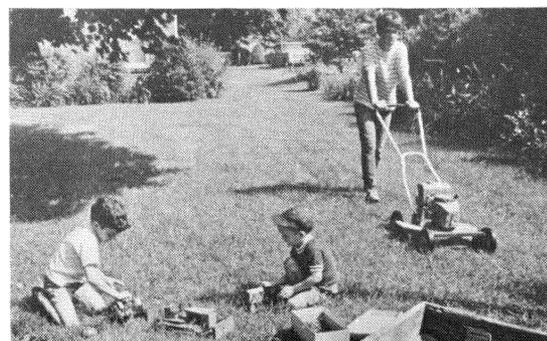


Figure 8. The presence of children and toys make mowing a hazardous operation.

11. Stay clear of discharge chute.
12. Wear proper clothing. Avoid loose fitting clothing that might become entangled in moving parts. Wear heavy shoes, preferably safety shoes. Do not mow wearing sandals or bare footed. Jeans and slacks will help reduce leg injuries and safety glasses will aid in protecting your eyes.
13. Keep small children and pets away from mowers.
14. Only physically fit and responsible persons should be permitted to operate mowers.

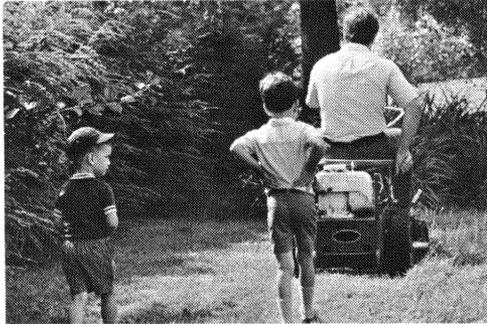


Figure 9. Children should not be allowed to follow mowers. A sudden reverse in the direction of mowing could be fatal.



Figure 10. Wrong way.



Figure 11. Right way.

15. Mow across, never up and down, steep slopes. This helps you to control mower. It also helps to keep the mower from sliding into the operator, or the operator from slipping and falling into the mower. Shoes equipped with spikes or cleats will provide better footing on steep slopes and wet grass.
16. Don't permit the power mower to pull you. To maintain control, slow it down; never run or trot.
17. Riding mowers require extra safety precautions on rough terrain and under low, overhanging limbs.
18. Use extreme care when mowing near streets. Observe traffic and obey traffic regulations when moving mowers on streets.
19. Disconnect the spark plug wire before leaving an engine-drawn mower, even for a short time. This is especially important with the new, easier operated starter.
20. Always turn off the mower switch and disconnect the cord of an electric mower before leaving it.
21. Avoid using an electric mower when the grass is wet. Make sure the mower and cord are in good condition.



Figure 12. Too much speed near ditches and retaining walls can be dangerous.



Figure 13. Extra riders should never be allowed on mowers.