



UNIVERSITY OF
FLORIDA

IFAS EXTENSION

Safer Tractor Operations: Introduction¹

Carol J. Lehtola and Charles M. Brown²

Tractors play a vital role in the citrus industry. Proper training is important because you may be required to drive a tractor to spray herbicides, fertilizer, pesticides or other chemicals.

Tractor incidents are responsible for many injuries and deaths in the U.S. every year either through unsafe operation or because the equipment itself is not up to modern safety standards.

Florida AgSafe, the Florida Agricultural Safety Program, has created a series of publications to be used in training and education in the safer use of tractors. This workbook introduces the series of six comprehensive circulars for different professions and owners. Each of the eight fact sheets focus on one specific area of tractor safety (IFAS Publication Number is in parentheses).

- Safer Tractor Operations for Agricultural Employers (CIR1249)
- Safer Tractor Operations for Privately Owned and Operated Farms and Ranches (CIR1250)
- Safer Tractor Operations for Home and Acreage Owners (CIR1251)

- Safer Tractor Operations for Landscape Maintenance and Horticultural Industries (CIR1252)
- Safer Tractor Operations for Rescue Workers and Emergency Personnel (CIR1253)
- Safer Tractor Operations for Farm Workers/Employees (CIR1254)

These publications are ideal for use as the basis of tractor safety programs. They cover many topics related to safer tractor use and include training activities, pre-post tests and record-keeping tools.

Safer tractor operations are divided in this series into three parts:

1. **Safer Environments**
2. **Safer Equipment**
3. **Safer Operators**

The following eight fact sheets in the series will help improve your ability to operate tractors.

- Getting Started on the Right Foot: Dangers of Bypass Starting (AE299)

1. This document is ABE342, one of a series of the Agricultural and Biological Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Published: April 2003. Please visit the EDIS Web site at <http://edis.ifas.ufl.edu>.

2. Carol J. Lehtola, Associate Professor, and Charles M. Brown, Coordinator for Information/Publication Services, Agricultural and Biological Engineering Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

- When Two's a Crowd: Dangers of Extra Riders on Tractors (AE300)
- Filling Gas Cans Safely (AE301)
- Avoid the Invisible Hazard: Know about Soil Shear Lines (AE305)
- Shortcuts Are Short-sighted! or, Invest Seconds, Save Lives (AE306)
- Ready or Not? Get Ready with a Tractor Operator Checklist (AE307)
- Yee-Haa! Formula for a Successful Tractor Rodeo (AE308)
- Hand-me-down Hazards: Dangers of Used Equipment (AE309)

Additional updated information is being added continually. You can locate these publications by visiting the Florida AgSafe Web site:

www.flagsafe.ufl.edu

or the UF/IFAS Extension Publications Web site, EDIS, at:

edis.ifas.ufl.edu

Then click on "Agricultural Safety."

Other publications that may be of interest to those starting an agricultural safety program are:

- Small Farmer's Resources for Safety (ABE330)
- Agricultural Employer's Resources for Safety (ABE331)

A number of OSHA publications that are relevant to safer tractor operations have been selected and are available through the Web sites listed above and include topics such as:

- Roll-Over Protective Structures (ROPS) for Tractors Used in Agricultural Operations -- OSHA Standard 1928.51 (AE293)
- Occupational Noise Exposure: OSHA Standard 1910.95 (AE141)

- Guarding of Farm Field Equipment, Farmstead Equipment, and Cotton Gins -- OSHA Standard 1928.57 (AE134)

Why Tractors Are Important to Grow Citrus

Tractors play a vital role in the citrus industry. Proper training is important because you may be required to drive a tractor to spray herbicides, fertilizer, pesticides or other chemicals.

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NOTE: SHOULDN'T THIS BE FOR CITRUS ONLY?

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New Tractor Technology Helps Modernize the Citrus Industry

Special tractors and equipment are needed to grow and harvest citrus properly.

New technology includes sensors that act like "**electronic eyes**" that see the position of each tree so the spray hits the exact target area.

Tractors are also equipped with **G-P-S**, global positioning satellite systems. The grove is mapped on a computer that communicates with a satellite in space so you can see exactly what each tree requires to produce the best fruit possible.

Why Safety is Most Important



"Safety is the Bottom Line" appears on all the publications in the Safer Tractor Operations Series. This slogan does not mean that safety is the last thing to consider in planning an operation - safety is the **first** thing to consider.

The idea behind this slogan is that safety practices always show up on the bottom line. People work to improve their lives, not damage them. But if proper safety precautions have not been taken, or if adequately safe conditions or equipment haven't been provided, sooner or later, you'll have to pay the price for cutting corners on costs. It may seem cheaper not to fix a guard, buy properly grounded equipment or taper a field away from a drainage canal. But, in the worst case possible, if your negligence causes injury or death, the personal and financial costs would be staggering. In addition to the tragic loss of lives, there would be lost livelihoods, earning losses, lower morale, lower profits, higher insurance premiums and other problems. It could even cause the end of the citrus industry in this area.

Besides, making the workplace safe makes sense and it's the right thing to do.

Safer Environments

Safer Equipment

Safer Operators