Tackling Productivity in Mechanized Logging[1]

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Abstract: "Tackling Productivity in Mechanized Logging" is a new video-based training package developed by forest engineers at Oregon State University College of Forestry. The package contains a 19- minute video program, Discussion Guide, and ten "Mechanized Harvesting Productivity Cards."

Keywords: Training, video

Audience

This videotape can be used with logging crews involved with mechanized harvesting operations, or with anyone interested in an overview of these operations. Logging crews would view the video with the intent of applying the ideas directly and immediately to their jobs, while others would use it to gain a general impression of the equipment, process and sequence of events in a mechanical logging operation.

Overview

This program demonstrates realistic conditions and shows the physical and mental environment of loggers involved in mechanized operations. It illustrates the complex interactions that occur during a mechanized logging operation, and identifies five major causes of delays: bottlenecks, buffers, breakdowns, and blunders (the 5 B's). It suggests that these "time bandits" can be identified and eliminated by the crew members.

Key concepts in making productivity improvements are teamwork, communication, and cross-training. A football theme is used for continuity and interest. Crews are encouraged to increase a measurable goal: TD's (Truckloads Delivered).

Mechanical harvesting systems are always changing. This dynamic behavior is caused by changing timber types, weather conditions, terrain, equipment performance, operator performance, changing operating procedures, schedules, and new mill demands. Each time a change occurs, the system must be readjusted to get maximum productivity. These adjustments are often best initiated by crew members.

This video restricts itself to changes that lie within the control of the logging crew. Other important factors that influence productivity, such as equipment selection, unit layout, operator training, and scheduling are the main responsibility of supervisors, engineers, and owners, and are not considered in the program. It also avoids discussion of the logging costs; rather it focuses on reducing unproductive delays.

What will it do for you?

Loggers face a new challenge as they switch to mechanized systems. These high investment operations require new skills in making each piece of equipment mesh with the rest of the harvesting system. Using examples from actual logging operations, this training package demonstrates such critical concepts as

- **machine interaction**
- **smooth flow**
- **balanced production**
- **maintenance responsibilities**
- **downtime**
- **cross-training**

When used as part of a planned effort to increase productivity, the package will help:

- **Motivate** employees to use teamwork and communication on the job
- **Train** crews in the skills needed for self-supervision
- **Influence** crews to improve productivity
- **Teach** problem solving on the job.

The video blends real-world logging operations, current trends in mechanized harvesting, and the job environment for logging crews in a lively presentation designed to get **your crew talking productivity.**

The plastic-coated training cards help take the ideas from the video and put them where they count the most: **on the job.**

Who should use it?

- New employees
- Incentive crews
- Contract administrators
- Forest Industry trainers
- Students interested in logging as a career
- Even families and friends will enjoy the opportunity to see a mechanized harvest operation in action!

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