

## Technical Reports

---

BC Coastal Forest Sector Hem-Fir Initiative

**PROGRAM:** Harvesting and Conversion Program

**PROJECT #:** H.01

**PROJECT TITLE:** Effect of Log Length on Payload for Tridem Tractor/Tridem Pole Trailer Log Trucks

**PROJECT LEADER:** A.J. MacDonald

---

### Abstract

Five loads of standard-length (12.5 m), short, and long logs were loaded onto a seven-axle, tridem tractor/tridem pole trailer log truck in various combinations to determine the effect of log length on net payload. A review of historical scale records showed a relationship between log length and underweight loads, and the study objective was to determine whether increasing the log length was a viable option to achieve the maximum legal payload. The trial demonstrated that the truck could achieve its full licence weight using only standard-length logs, and that the logs occupied about 61% of the available bunk space. Excessive short logs or inattention to the actual truck weights was suspected as the more likely cause for underloading than the lack of long logs.

**Keywords:** payload, log length, tridem, log truck, pole trailer

### Contact:

Jack MacDonald  
FPInnovations – Forest Operations

Email: [Jack.MacDonald@fpinnovations.ca](mailto:Jack.MacDonald@fpinnovations.ca)

For copies of the publication please contact:

[FERICVancouver.Admin@fpinnovations.ca](mailto:FERICVancouver.Admin@fpinnovations.ca)