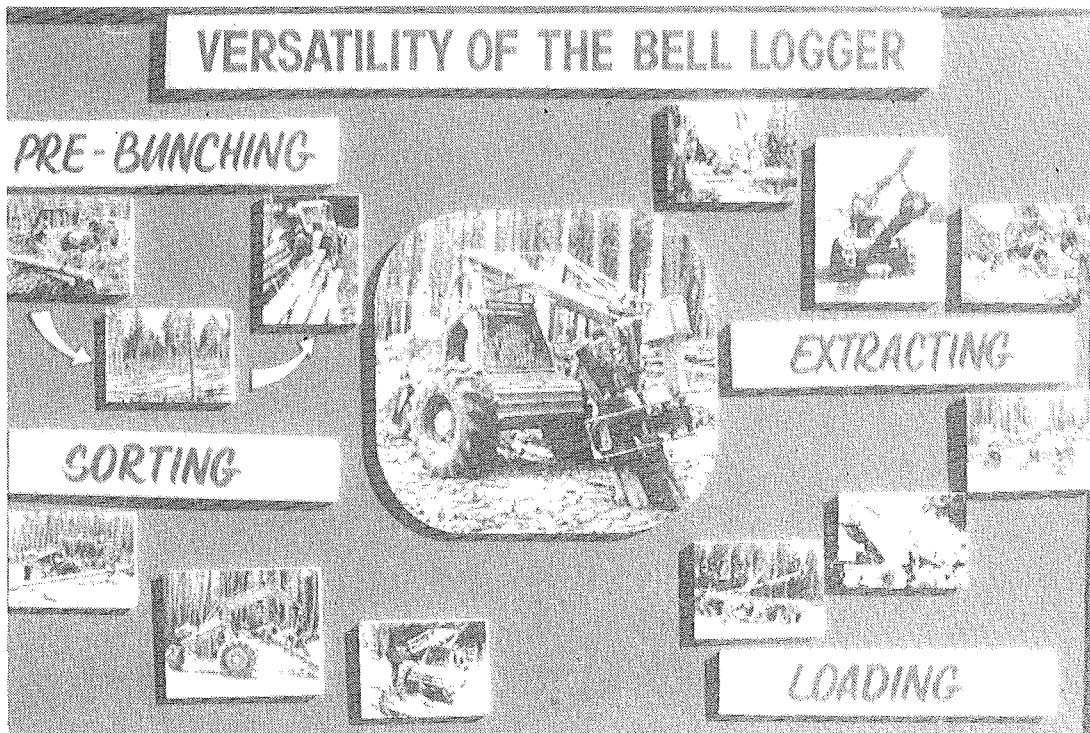


ONE MACHINE DOES IT ALL

Alan P. Gleason
LIRA

INTRODUCTION

Limited scale logging implies that the production level, for one reason or another, is restricted below optimum levels. To keep logging costs to a reasonable level it is important to minimise the capital investment on equipment. This can be accomplished by either using small, often under-powered, equipment for the job; or by using low purchase priced, second-hand equipment which is often unreliable and carries a high down time maintenance cost; or by using a single, versatile machine that is capable of performing more than one task. This paper looks at this latter option. The Bell Logger, a three-wheeled, 50 hp grapple skidder/loader is the one machine that can fell, bunch, skid, sort, stack and load.



THE MACHINE

The Bell Logger is a three-wheeled hydrostatically driven grapple skidder/loader. It has a three-cylinder air-cooled Deutz engine driving the hydrostatic transmission. It has a 1.2 tonne lift capacity and is a relatively easy machine to operate. The Bell is capable of performing many functions, and these are listed in the following section.

8. For really big wood there is the Super Bell which has a 68 horsepower engine and a 2.2 tonne lift capacity. The Super Bell has been used for sorting and stacking and as a loader in large old crop size material.
9. With a couple of adjustable spanners the logging grapple can be removed and replaced with a felling head. This makes the Bell into a directional feller-buncher. Although not tested in New Zealand this has proved successful in some overseas operations.
10. Finally the last option. If your logging operation includes a portable sawmill and the Bell can be equipped with a front end fork lift arrangement.

CONCLUSION

So there it is - one machine that does it all. It may not perform any one function as well as a purpose-built machine, but its ability to perform many functions outweighs this. This makes the Bell an ideal machine for some limited scale logging operations.

