

## Rangely Lakes

In early August, J.L. Duckworth began thinking about the winter activities of Rangely Lakes Company. J.L. was particularly concerned about the cash budgets for the winter, when revenue was quite limited. The other major concern J.L. was addressing was the need to keep the golf course maintenance staff busy during the winter.

The Rangely Lakes Company operates a summer-only golf course in northern Maine. To keep the maintenance employees on the workforce during the winter, they have developed two “Maine Woods Souvenirs” made out of the forest products from the Rangely Lakes area. For our purposes, they have two products: Mallard decoys and Mallard wall hangings. Both of these products are handmade; they have developed procedures so that skilled (but inartistic) maintenance workers can produce the two items. These souvenirs are marketed through numerous gift shops in New England. Rangely Lakes has priced the items attractively, so that they have never had any problems selling all the souvenirs they can produce. From a budgeting standpoint, J.L. Duckworth needed to know how much profit would be generated from the souvenirs made during the winter. For planning purposes, J.L. calculated profit as revenue (price x quantity) less the cost of the wood used and the cost of labor in the products.

Most gift shops sell the Mallard decoy for \$26.95, and the Mallard wall hanging for \$34.95. Rangely Lakes sells to the gift shops at \$12 and \$15 each. The average labor content is 1.1 hours for a decoy, and 0.5 hours for a wall hanging. Each labor hour cost Rangely Lakes \$7.15, including fringe benefits. Although Rangely has some flexibility in the amount of labor it uses, it monitors labor use very closely to be certain that enough production is planned to keep the workforce employed, and the production plan does not require more labor than the amount that can be available.

The souvenirs are made from native lumber, carefully selected during the summer as forest operations are performed. Each decoy requires 2.9 board feet of this special lumber; each wall hanging requires 4.8 board feet. (A board foot is 144 cubic inches of lumber.) More than 25,000 board feet were available for last winter’s production season; this number may be somewhat higher or lower, depending upon lumbering activities during the next month. The anticipated market price for the wood is about \$1.30 per board foot.

For J.L. Duckworth’s “first cut” at the budget for the winter months, the plan was to make the same number of decoys and wall hangings as last year. A search of the records showed that 3,500 decoys and 2,500 wall hangings had been made. How would this plan affect J.L.’s concerns?

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Notes: [1] This just in-- We can only get 17,000 board feet of lumber and we want to use between 4,000 and 6,000 labor hours. [2] Check figure is \$14,240.