1106-92-565 Michael Kelley* (makinnc@gmail.com), Bill Bauldry and Eric Marland. Optimal cycle length for a managed forest. Preliminary report.

It is well established how to calculate the optimal cycle length for a managed forest if you are interested in maximizing the amount of wood harvested from a forest. However we are typically not interested in maximizing wood, we want to maximize our profit. As offset protocols begin to incorporate the costs of carbon and the time value of emissions, this problem becomes somewhat more complicated. Here we show the development of a model that incorporates these elements and then proves some generalizations. With an optimal cycle time in hand, we then show a simulation based optimization for the transition time between a current cycle and the optimal cycle. To maximize the usefulness of the approach, we outline methods and results for incorporating uncertainty and economic discounting. (Received September 02, 2014)