

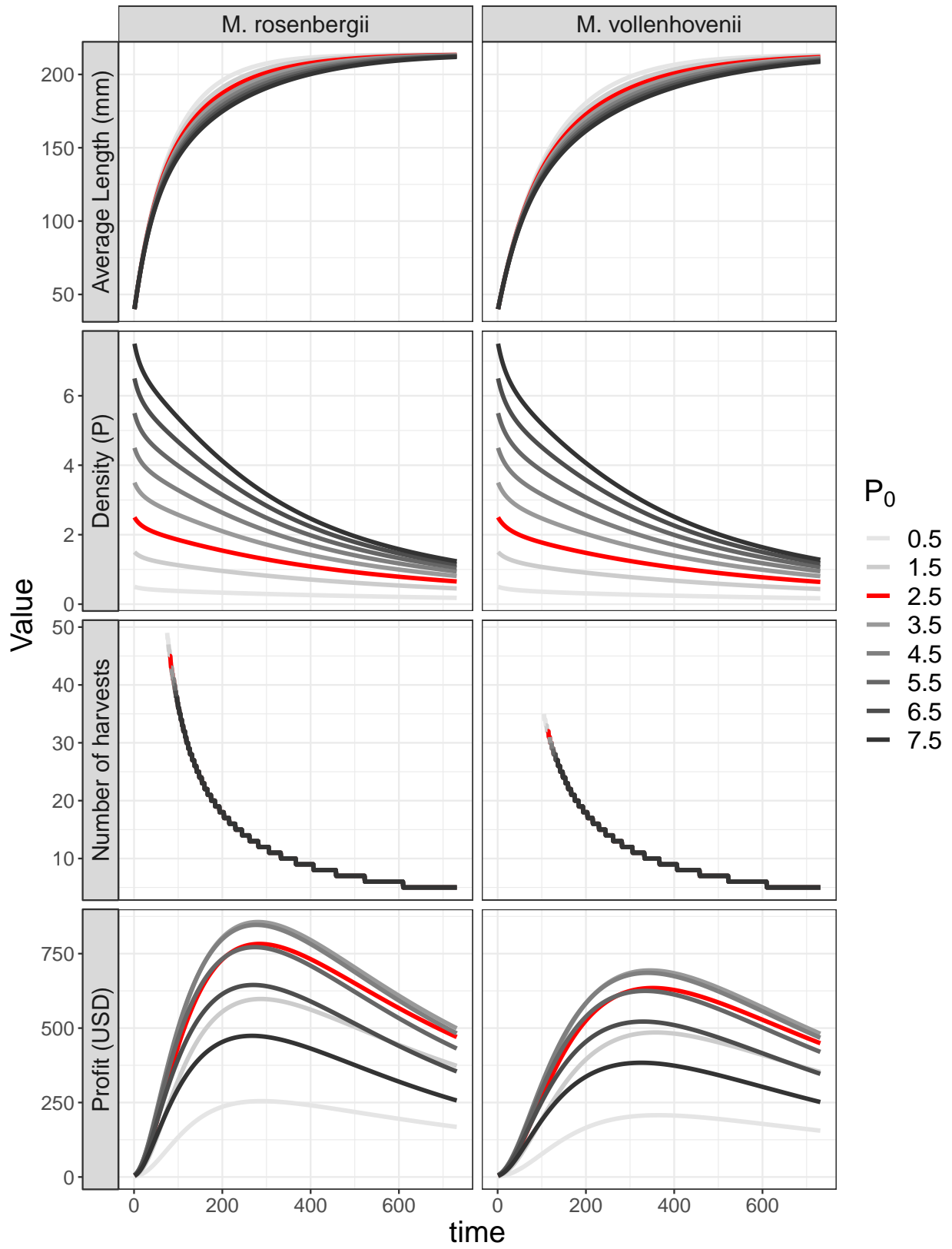
# Full Analysis

*Chris Hoover*

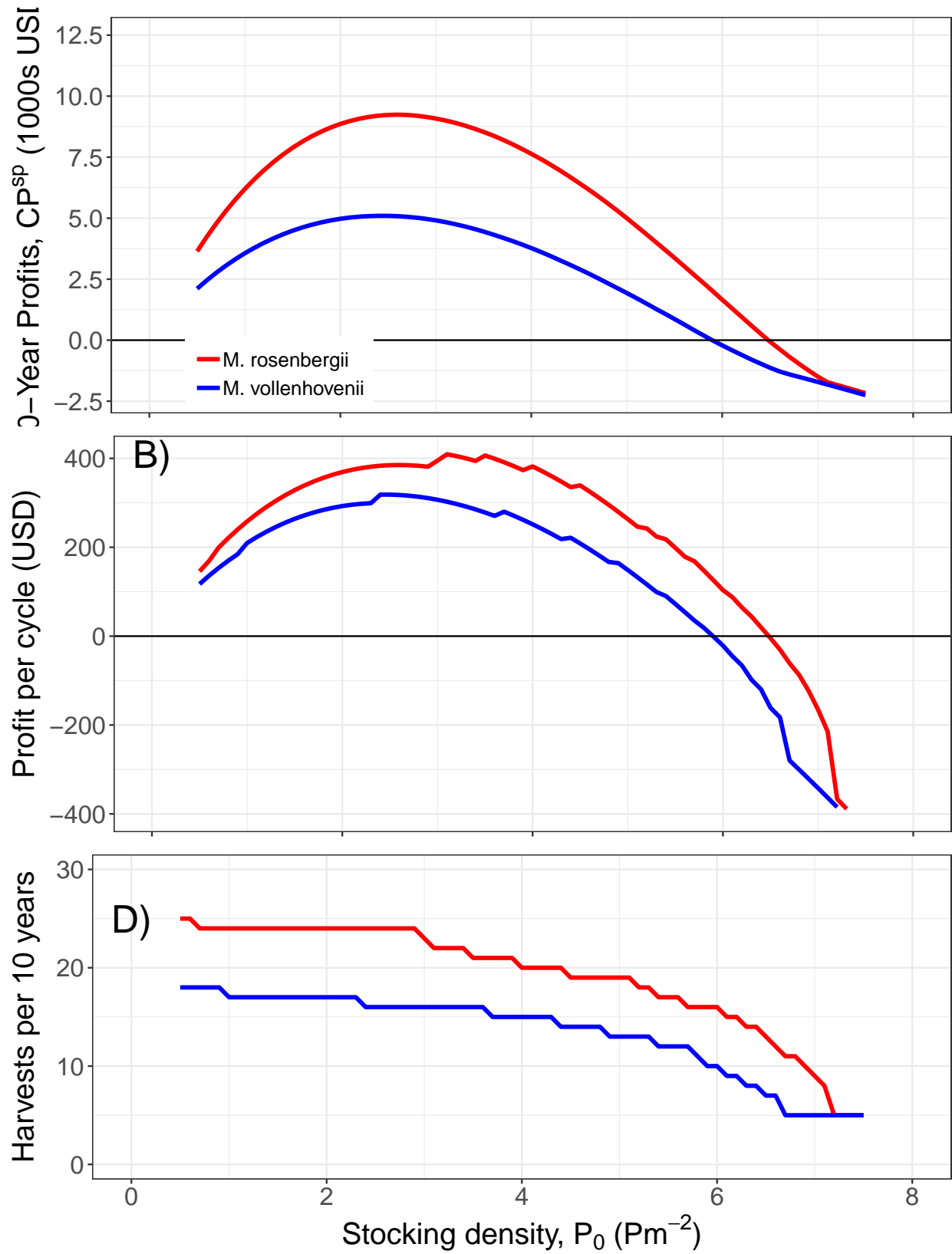
*August 22, 2018*

## **Numeric estimation of max profit**

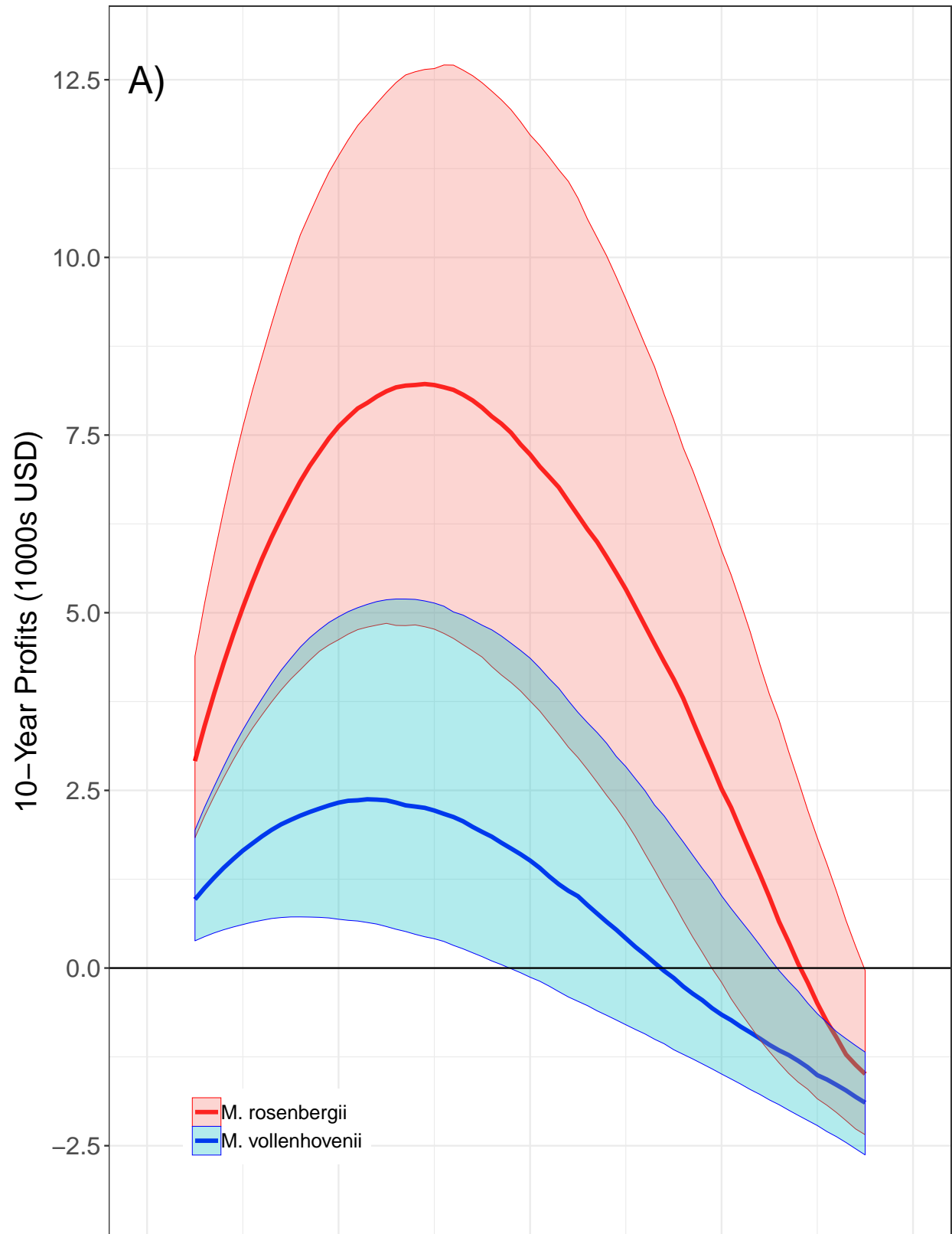
For each prawn species, shows trajectories of length, density, harvestable biomass, and profit over time over a range of stocking densities

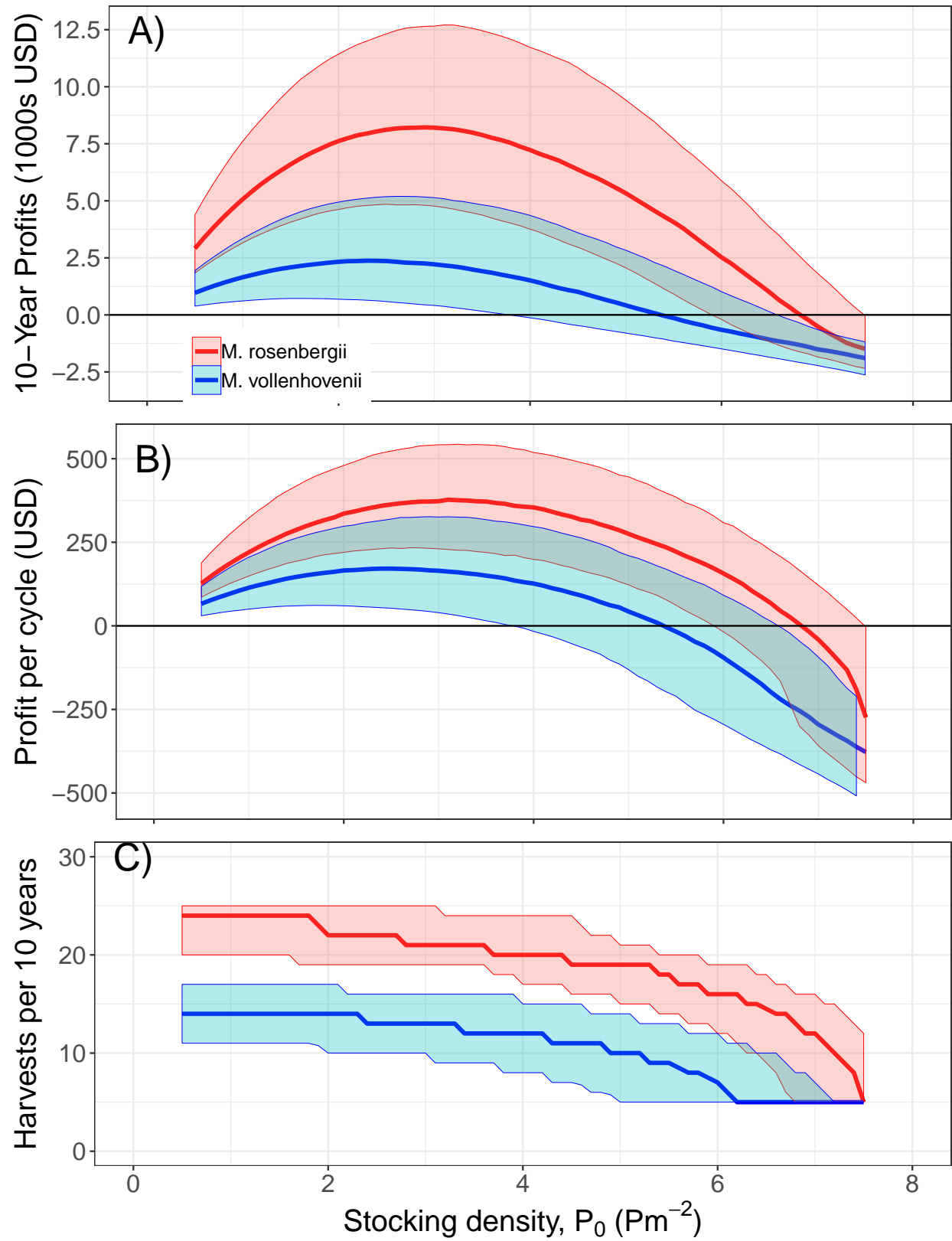


## Eumetric curves



We want to add estimates of uncertainty to the eumetric curve in addition to the eumetric curve generated by point estimates of all parameters (above). We'll use the same parameter sets from the latin hypercube generated for the PRCC sensitivity analysis to run the model over all tested stocking densities





## Optimal management table

Also want a table showing set of parameters and outputs from “optimal management”

| Parameter                        | Definition                | <i>M. vollenhovenii</i> | <i>M. rosenbergii</i>  |
|----------------------------------|---------------------------|-------------------------|------------------------|
| $P_{0opt}^{sp}$                  | Optimal stocking density  | $2.4 \text{ } Pm^{-2}$  | $2.6 \text{ } Pm^{-2}$ |
| $L_0$                            | Mean length at stocking   | $40 \text{ } mm$        | $40 \text{ } mm$       |
| $\Omega(t_0)$                    | Total biomass at stocking | $kg \text{ } \$k$       | $g\$$                  |
| $T_{opt}^{sp}$                   | Optimal harvest time      | $days$                  | $days$                 |
| $Y(T_{opt}^{sp}, P_{0opt}^{sp})$ | Commercial yield          | $kg \text{ } \$kg$      | $\$$                   |
| $L(T_{opt}^{sp})$ Mean length at | harvest $kg$              | $kg$                    |                        |

Epi simulations

