Summary of model output

Recruitment variability

We can also relax the assumption about constant prices, and let prices be dynamic (correlated random walks) and impose a feedback onto optimal escapement rules (making the optimal escapement also time varying).

Management response

These plots demonstrate that a quick management response has a huge impact on total net benefits. The faster response scenario (time lag = 0) also translates into higher cumulative recruitment and harvest.

Again we can illustrate the effect with dynamic prices

Price Declines

These plots demonstrate that a slower price decline….quick management response has a huge impact on total net benefits. The faster response scenario (time lag = 0) also translates into higher cumulative recruitment and harvest.

The above price declines are assumed to be linear (non-stochastic) but we can introduce dynamic prices as we had before.

The above price declines are built in as determinsitic trends. We can also include the dynamic price variability, as above using a CV = 0.1.

Probability of transition

With price CV

Harvest CV

This is meant to simulate imperfect harvest (above / below realized optimum)