

BSAI 2017 Simulation Test

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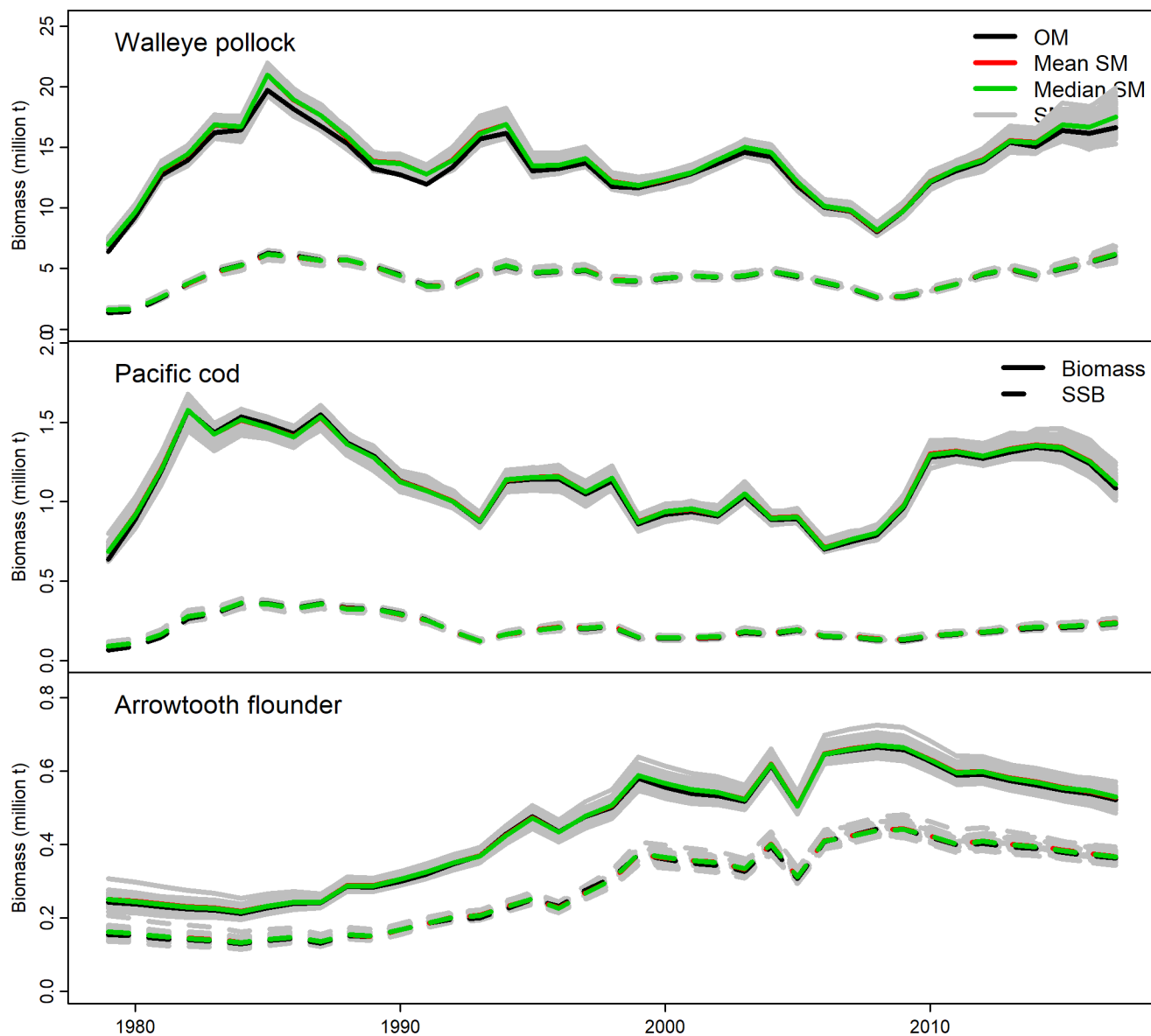


Figure 1: Fig 1. Time series of estimated biomass using penalized likelihood multi-species CEATTLE from an operating model (OM) fit to data, models fit to simulated data (SMs), and mean/median of the SMs.

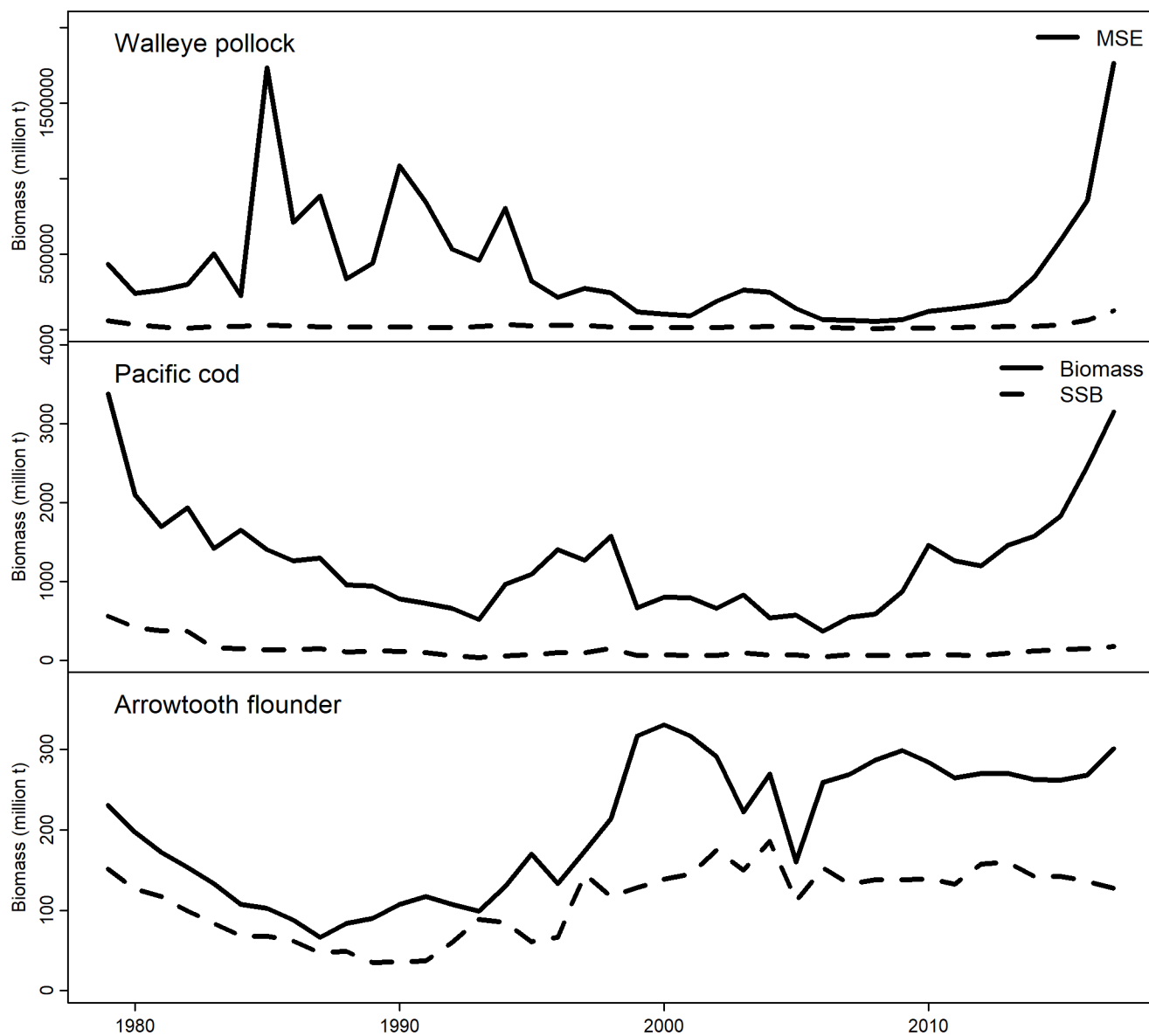


Figure 2: Time series of estimated biomass mean squared error (MSE) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

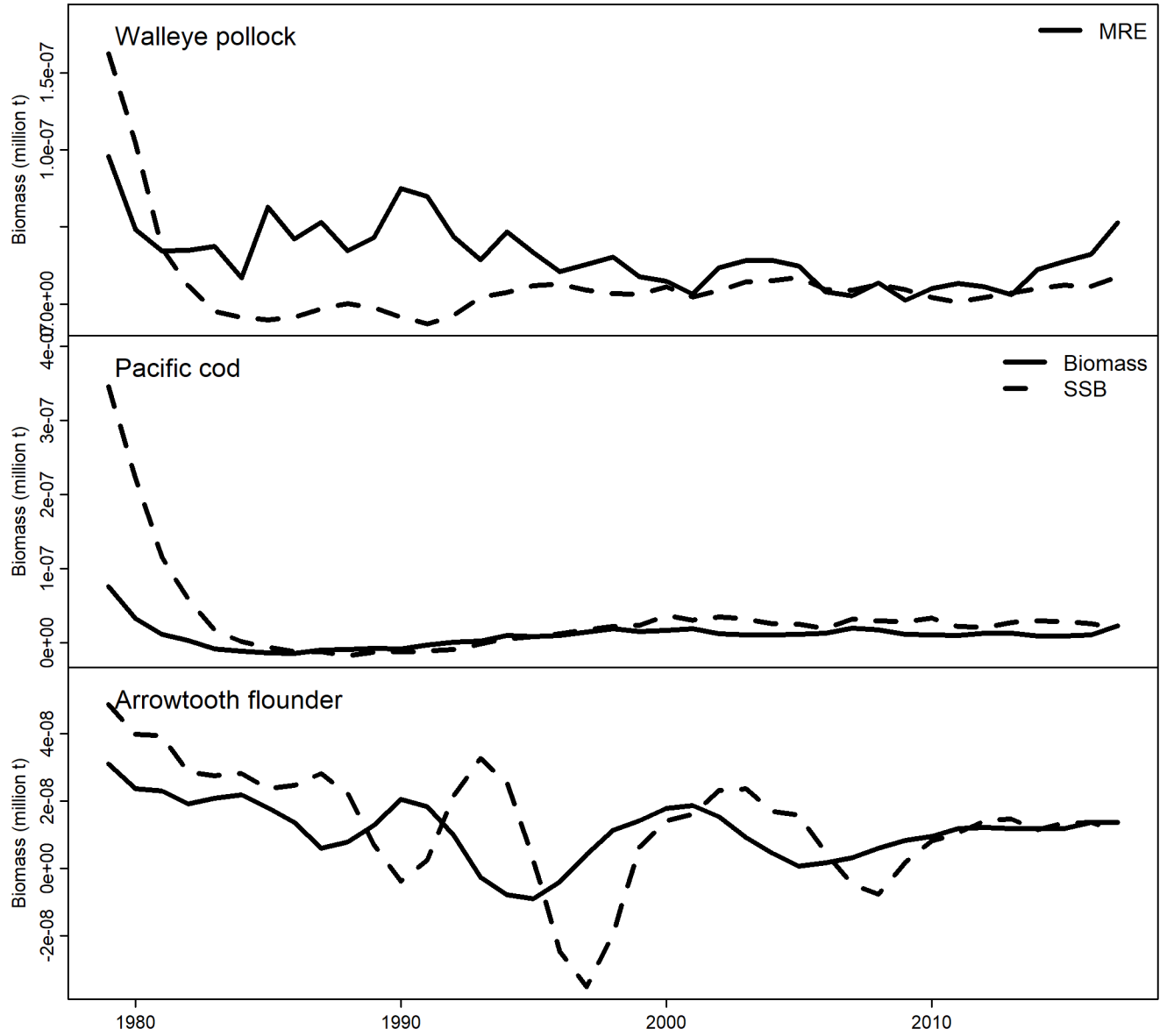


Figure 3: Time series of estimated biomass median relative error (MRE) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

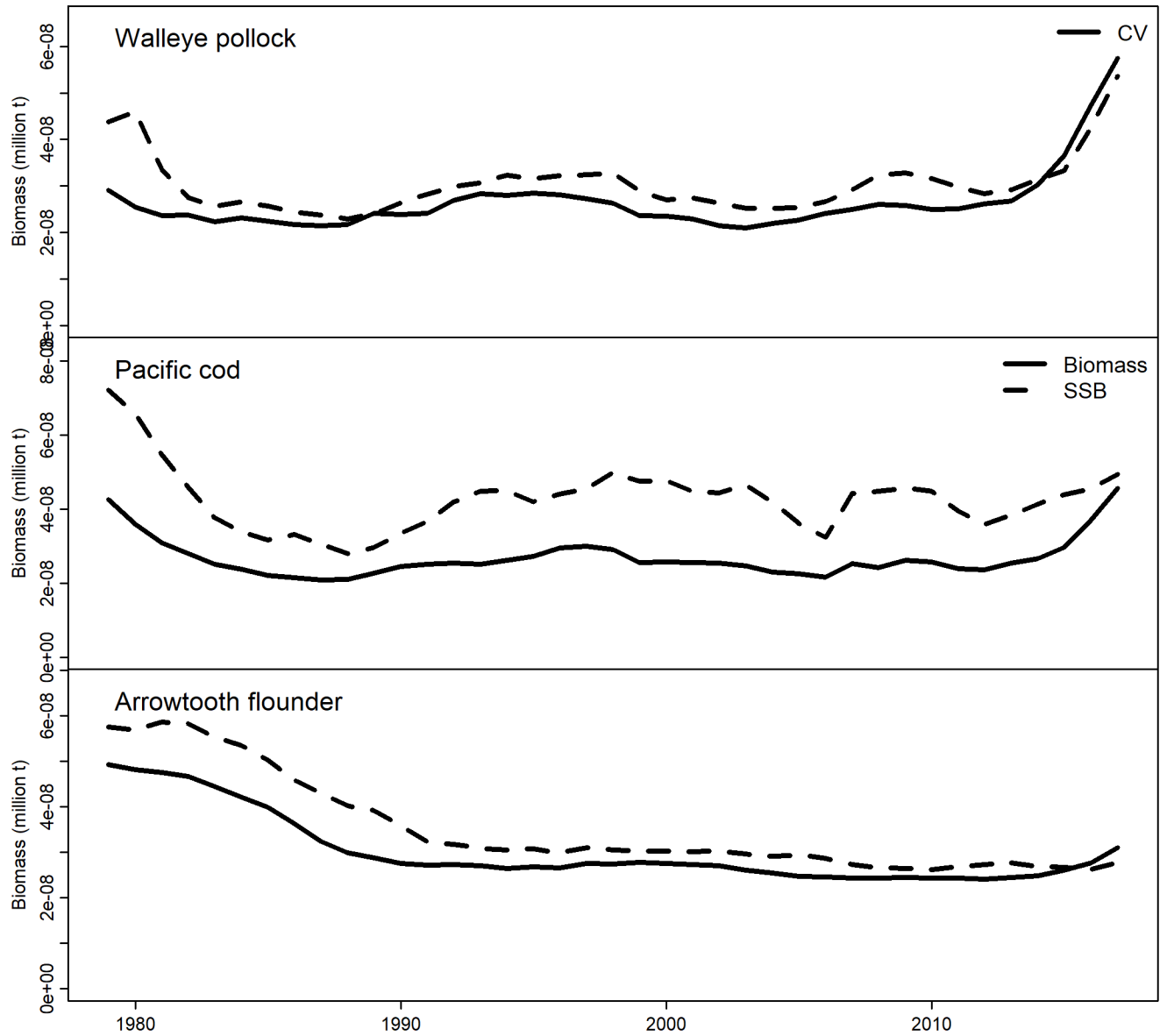


Figure 4: Time series of estimated biomass coefficient of variation (CV) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

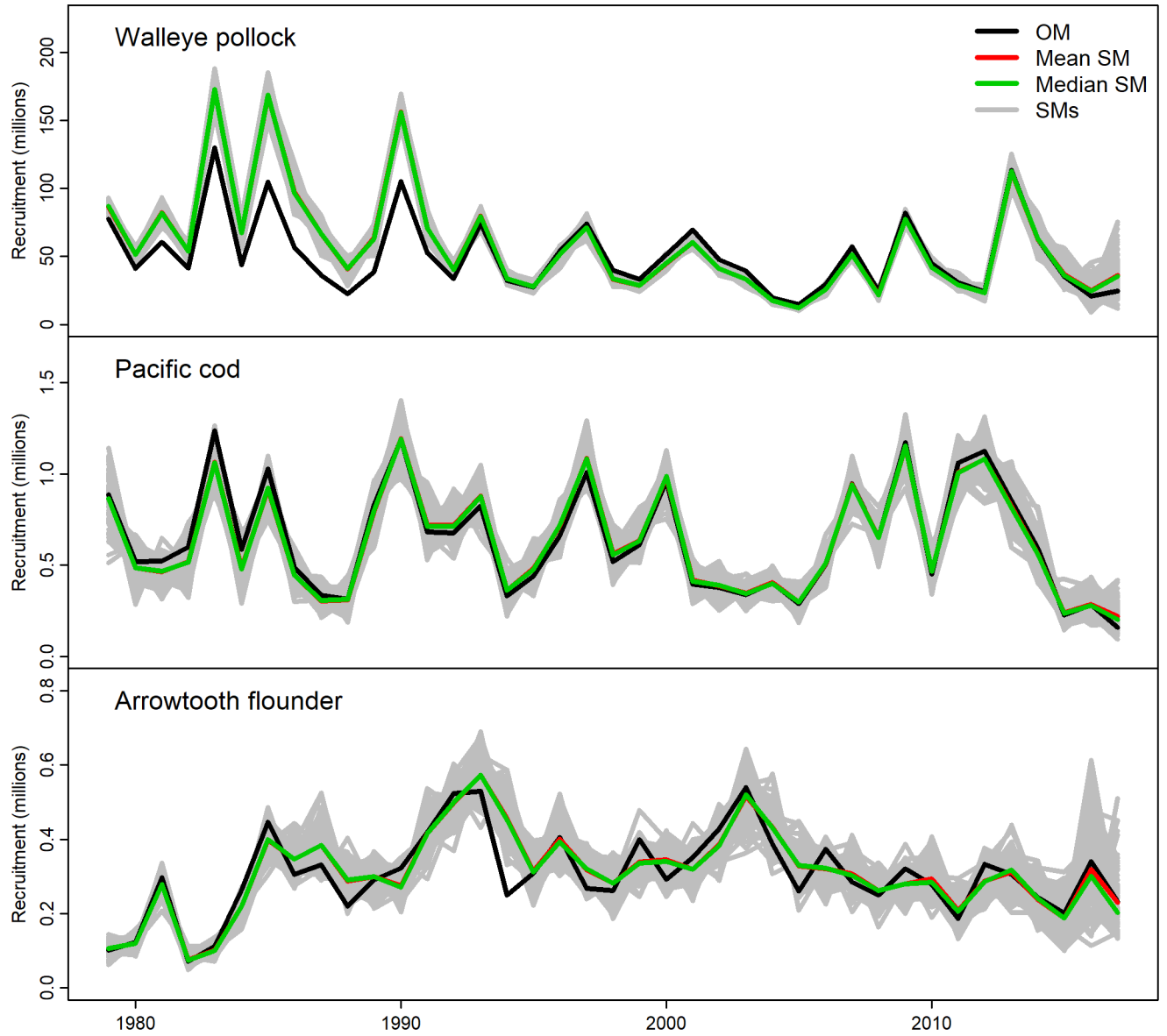


Figure 5: Fig 1. Time series of estimated recruitment using penalized likelihood multi-species CEATTLE from an operating model (OM) fit to data, models fit to simulated data (SMs), and mean/median of the SMs.

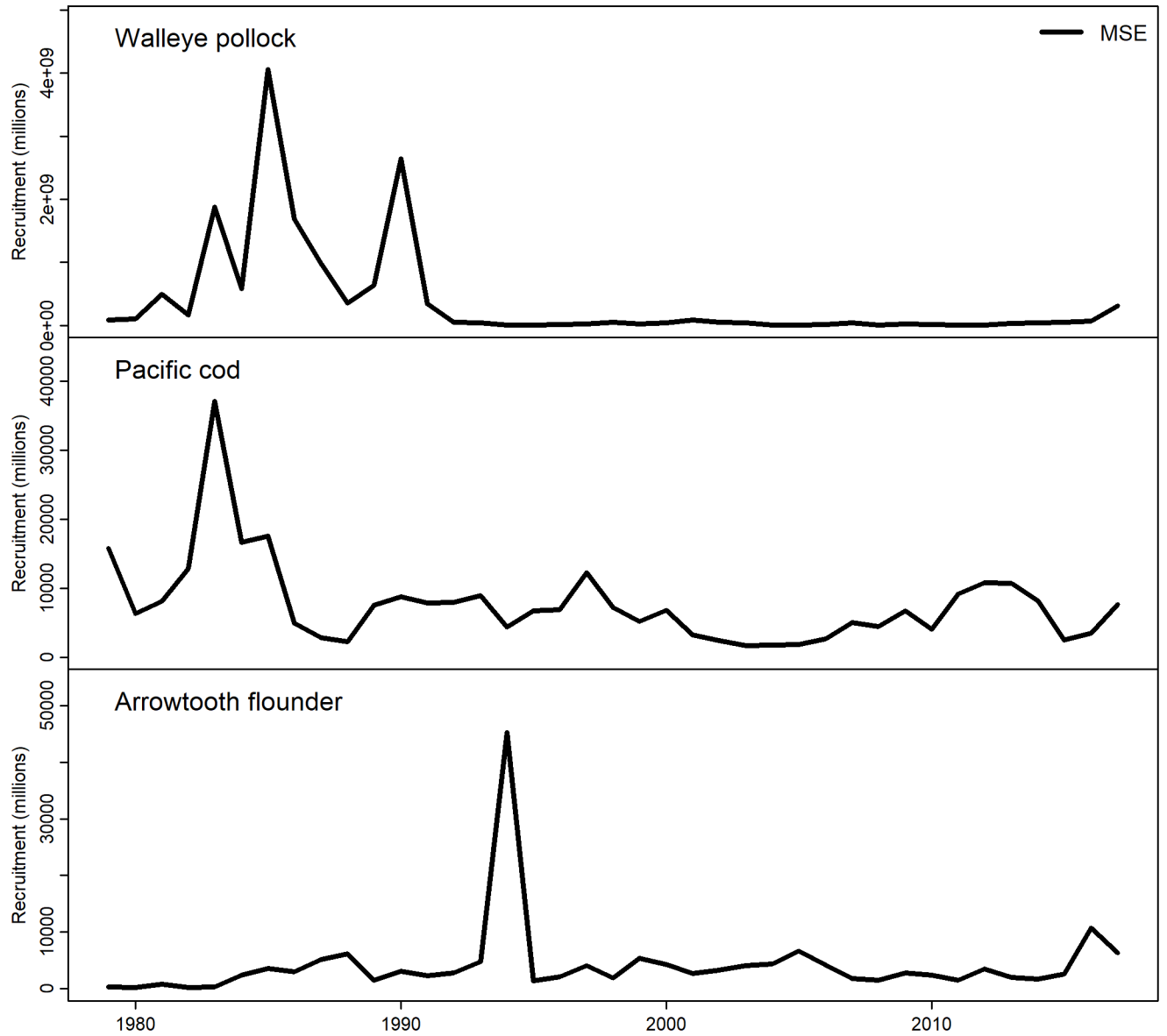


Figure 6: Time series of estimated recruitment mean squared error (MSE) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

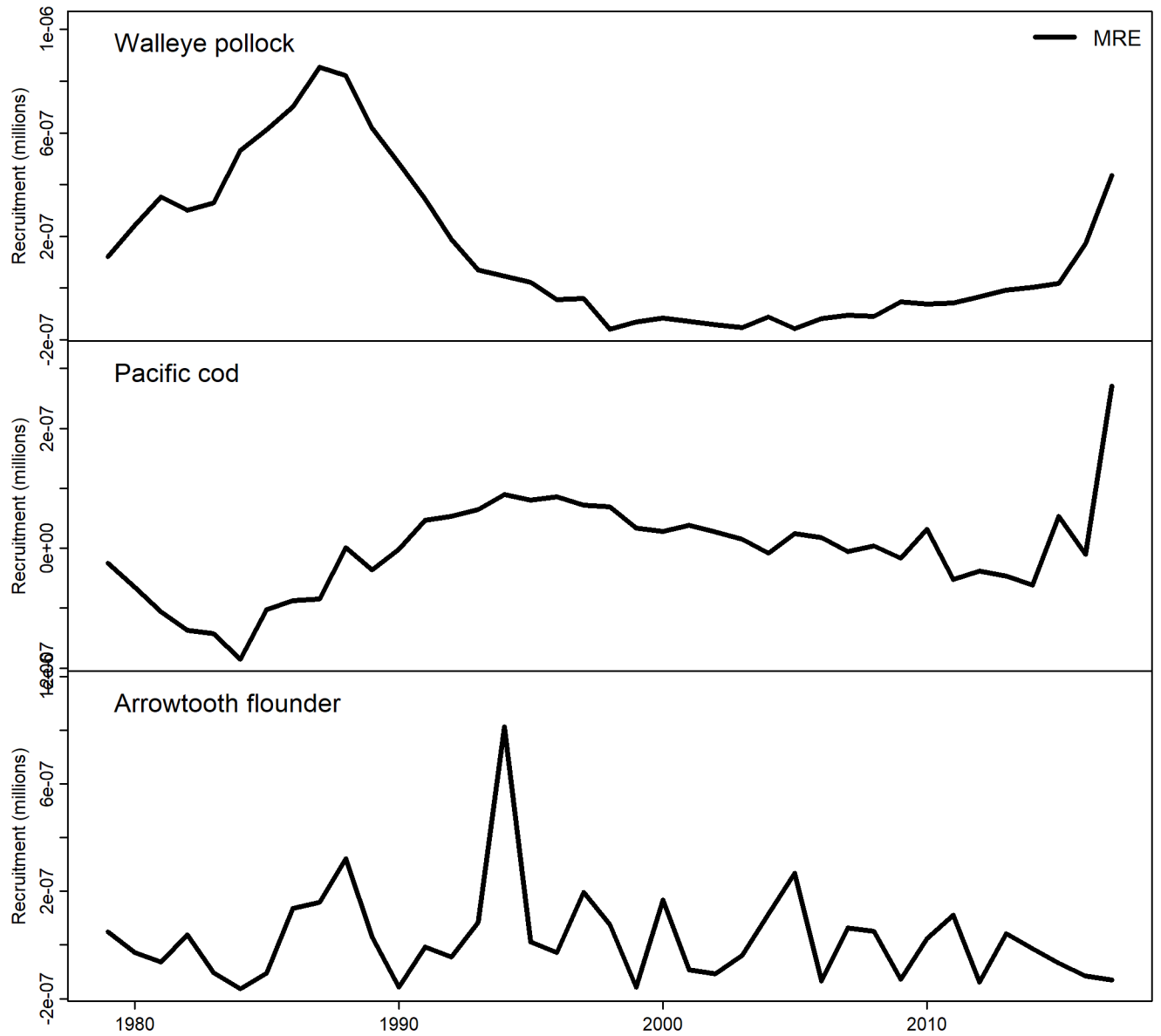


Figure 7: Time series of estimated recruitment median relative error (MRE) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

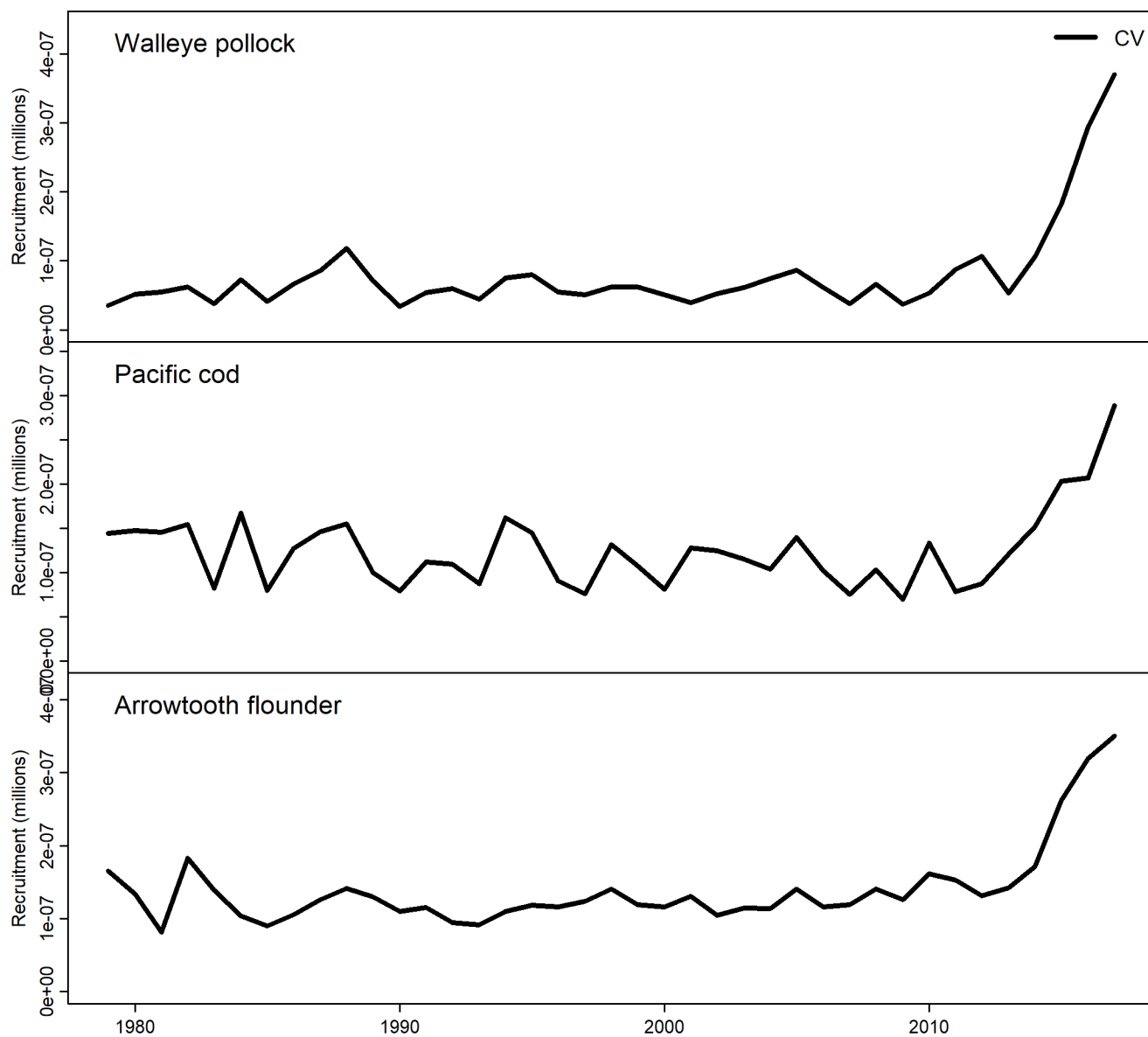


Figure 8: Time series of estimated recruitment coefficient of variation (CV) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

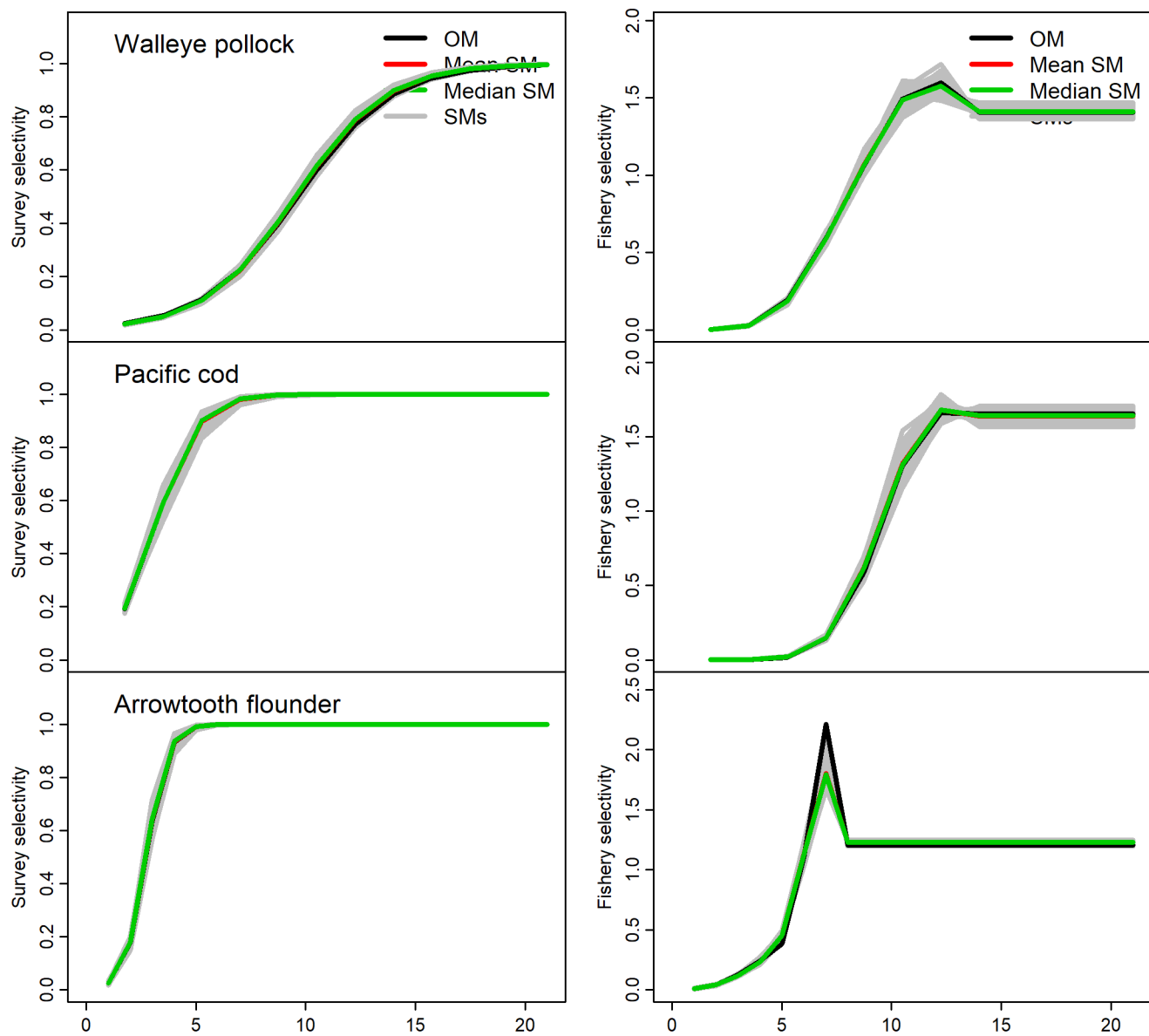


Figure 9: Fig 1. Estimated selectivity using penalized likelihood multi-species CEATTLE from an operating model (OM) fit to data, models fit to simulated data (SMs), and mean/median of the SMs.

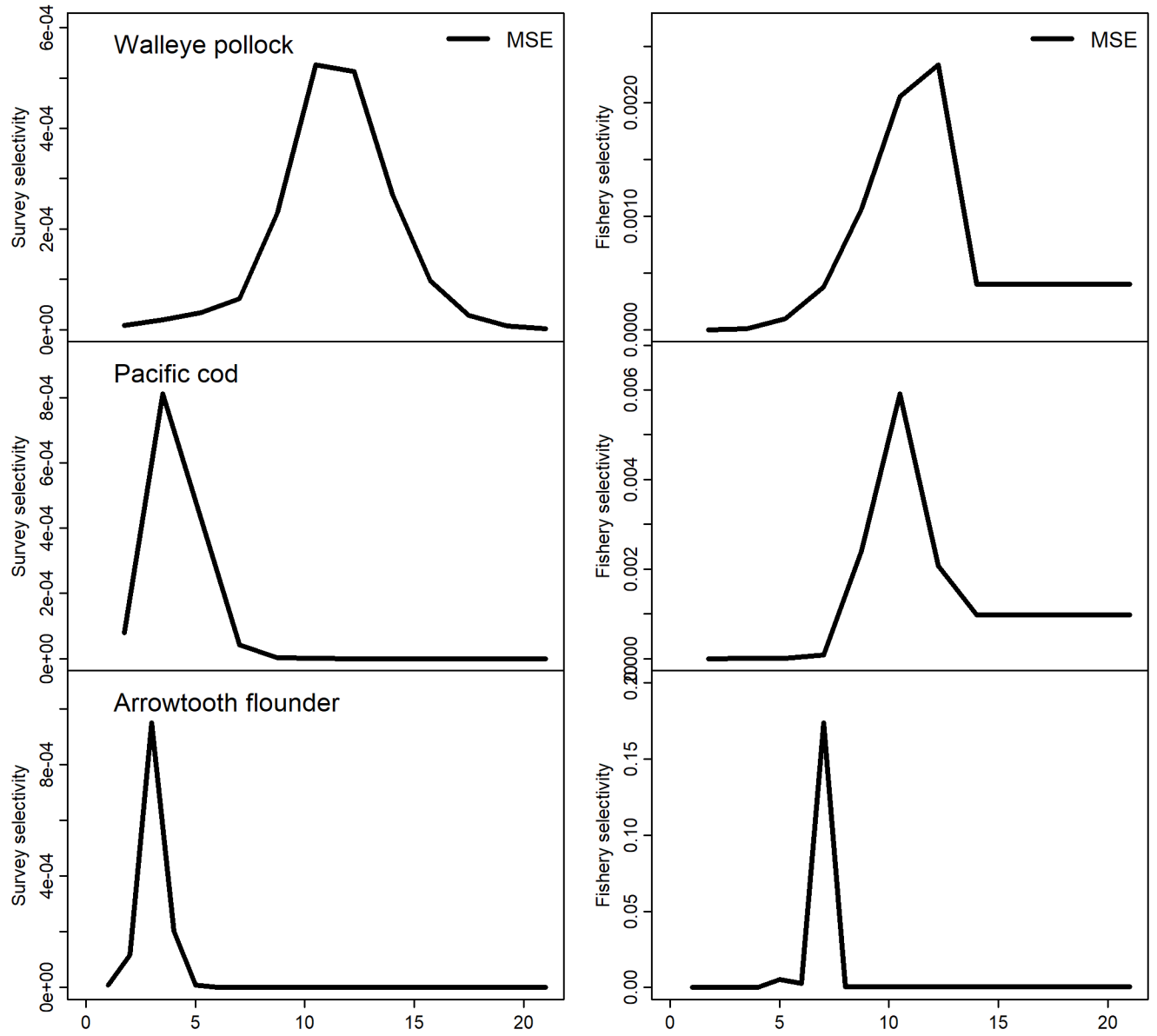


Figure 10: Estimated selectivity mean squared error (MSE) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

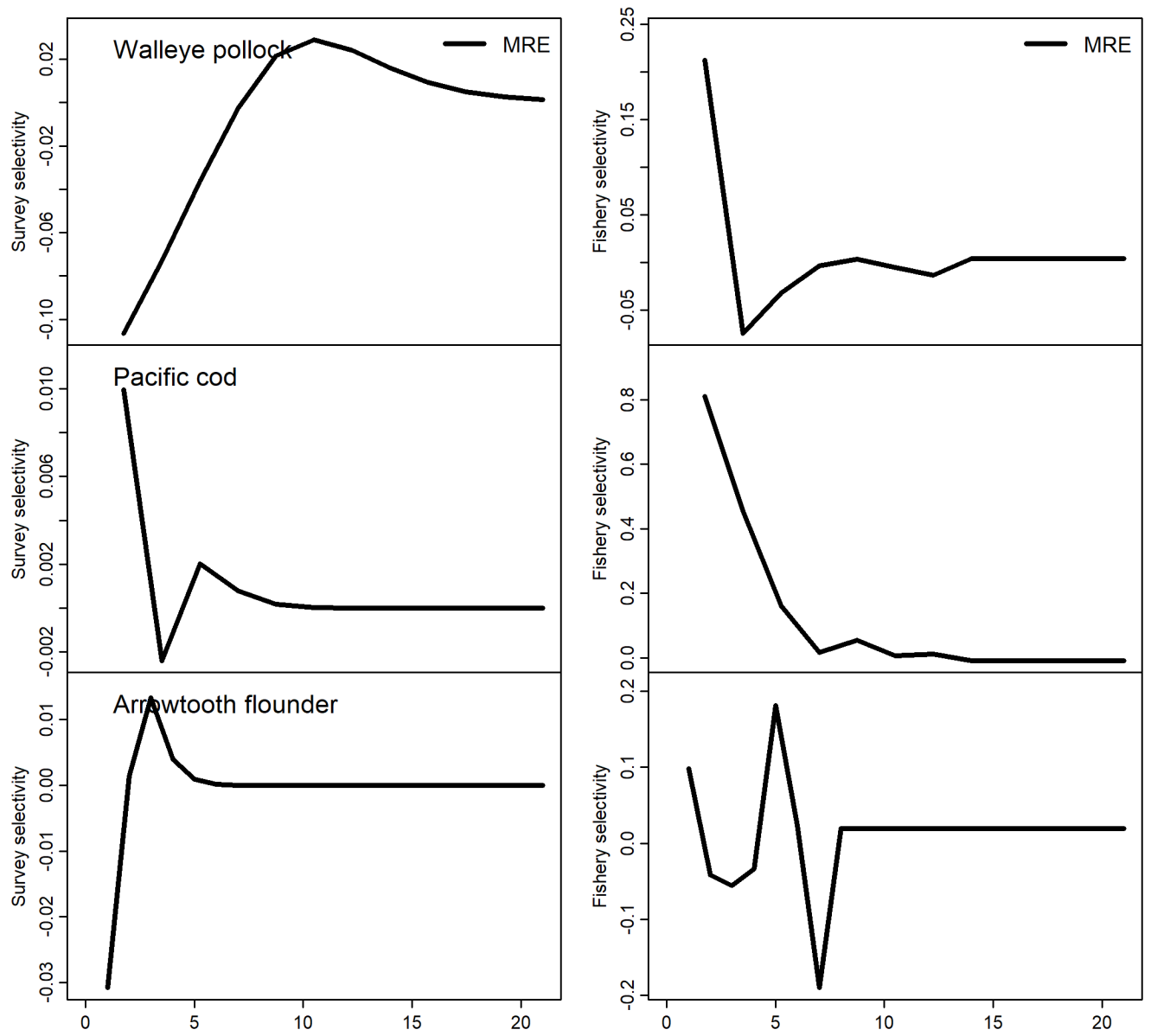


Figure 11: Estimated selectivity median relative error (MRE) of models fit to simulated data from multi-species CEATTLE using penalized likelihood

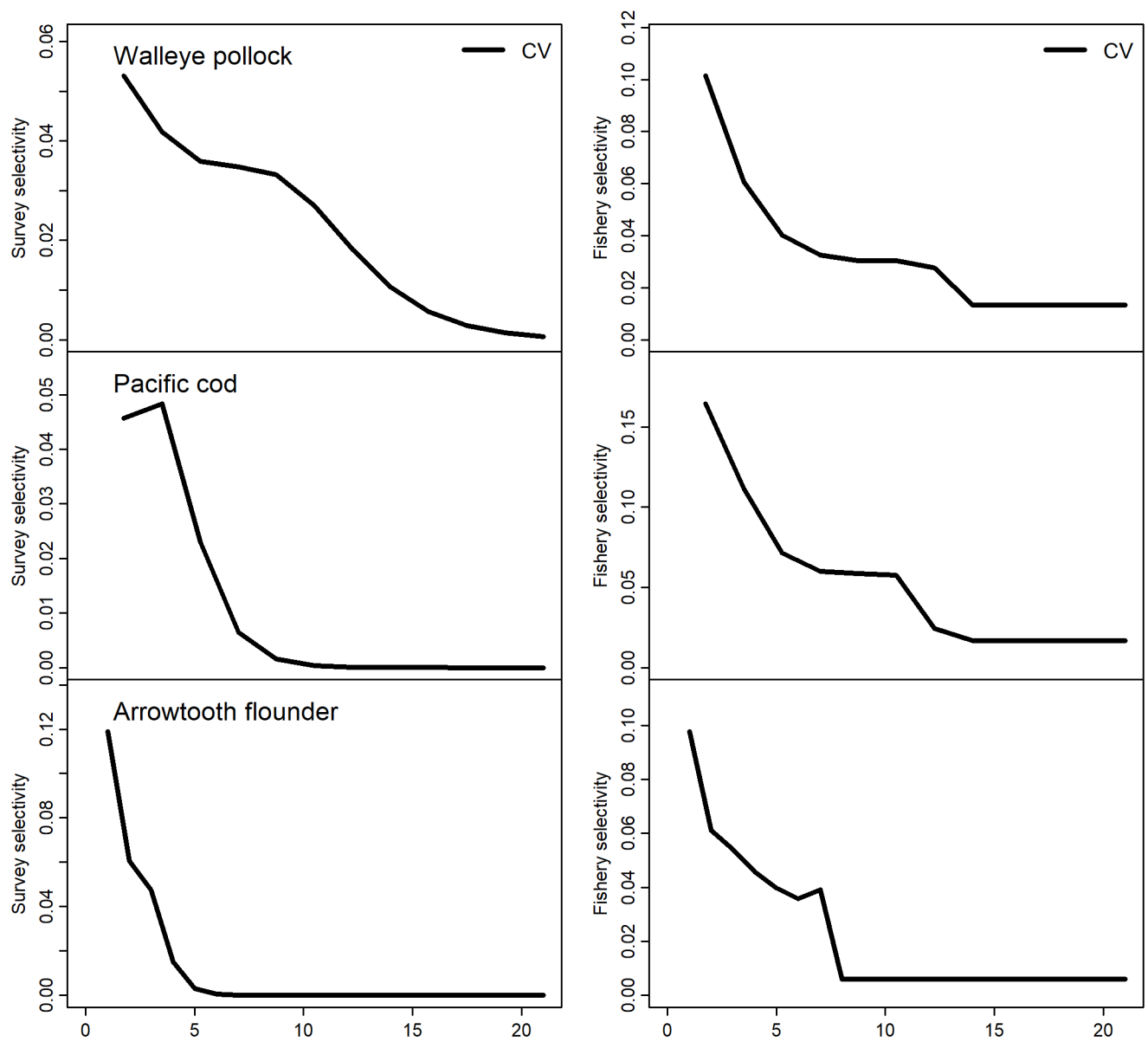


Figure 12: Estimated selectivity coefficient of variation (CV) of models fit to simulated data from multi-species CEATTLE using penalized likelihood