Bridge Runs

Run 1: Turn off all indices but NEFSC Spring BTS and Rec CPA

Run 2: Update fishery catches, fishing fleets and catch WAA estimates to comm/rec fleets

Run 3: Update Spring BTS and Rec CPA – Note that input CVs for RecCPA are unrealistically small and these had to be modified in order for the ASAP models to converge

Run 4: Add 2020-2021

Run 5: Update maturity

Run 6: Add NEAMAP

Run 7: Update remaining spring state indices (added VAST as well but didn’t turn them on)

Run 8: Rec CPA and both spring and fall VAST

Run 9: Rec CPA and VAST spring only (also a combined stock run that matches the single stock results. This combined run will be used for later runs.)

Run 10: same selectivity for Recreational and Rec CPA (done. Run9 AIC is better but there are a lot more selectivity explorations that could be done. This selectivity assumption will be taken forward.)

Run 11: switch to RE for recruitment and survival (“rec+1”) (done) Retro in north is gone.

Run 12: add mixing with p move north to south and south to north fixed at 0.1 (done. AIC is worse than Run11)

Run 13: add prior p move north to south (and south to north) at 0.1(done)

Run 14: switch to logistic-normal for age comp

Run 15: estimate sd scalar for aggregate rec cpa indices (doesn’t converge)

Run 16: add AR1 on p move north to south (doesn’t converge)

Run 17: go back to RE only on recruitment (“rec”) with AR1 on movement to see if it gets better AIC than no RE on movement and “rec+1”. “rec+1” has better aic, but didn’t complete the script.

Run 7: Update remaining spring state indices (added VAST as well but didn’t turn them on)

TO DO (starting from run 7, 8 or 9):

1. Use RE instead of selectivity block for Rec fleets (use run 8 or 9) (Run 2 based off of Run 1) (DONE. Did not converge. selpars hitting upper bounds and variance of Sel re is going to 0)
   1. K: Summarize big commercial management changes and in minimum size of rec fishery
2. Examine VAST selectivity (done) Run 1
3. Turn on all indices and estimate RecCPA CV (Run 3 based off of Run 2. DONE. CVs for north and south are 10 and 7 times input CVs)
4. Random effects (rec+1)
   1. All state and federal indices + RecCPA (done) Run 1
   2. VAST + RecCPA (Run 4 based off of Run 3)
   3. NEFSC + RecCPA + NEAMAP (Run 5 based off of Run 3)
   4. Compare 3 anf 4 b,c.
5. Pick best of #3, and then…..
   1. Estimate S-R relationship?
   2. Estimate temperature impacts (recruitment)
   3. Estimate M random effects (i.e. time-varying M)
   4. Movement?