CKMR modelly workshop outline for June 2021

- Oriented to fisheries and by-catch;
- fairly "how-to" but some theory and general stuff too;
- all code in R using simulated datasets;
- focused on *looking* at code collectively, rather than individually running it or tweaking it (though you can).

1. Intro:
   (a) concepts— overview— benefits (for fisheries and bycatch)— applications to date— scope
   (b) Basics of how-to-construct-model and what-to-watch-out-for
2. "Realistic" POP example— "mammal"
   (a) what if fuzzy age data?
   (b) can we break it?
3. Super-simple POP example
   (a) can we break it?
4. "Realistic" HSP example— "shark"
   (a) HSP recap
   (b) genetic must-knows for, ahem, "modellers"
   (c) can we break it?
5. POP+HSP: full-monty CKMR-driven stock assessment for "fish"
   (a) what is CKMR really telling you?
   (b) [Several bits-n-pieces to talk about during this "fish" section; won't list them all here]
6. Elaborations
   (a) Length and age
   (b) Spatiality— should you? can you?
   (c) Other data
   (d) Diagnostics
7. More on case studies: SBT $\times 2$, School shark, Speartooth shark, Thornback ray
8. BYO
   (a) what would CKMR look like for a ... [audience to supply examples for discussion]
9. Design
   (a) Qualitative points
   (b) Laugh test
   (c) Full-on
      i. Inverse design
   (d) Optimal design
   (e) "Long CKMR"