

Tuesday Afternoon

Breakout Group 2: Recruitment and transmission for single population model

- Q1** - What is the basis for estimating annual recruitment?
- Q2** - How does recruitment depend upon population abundance? Is there a compensatory process (carrying capacity)? Is there an allee effect? What low abundance triggers decompensation.
- Q3** - Can recruitment (above the abundance level that triggers decompensation - allee effect) be modeled as a Beverton-Holt broodstock-recruitment process? If so, what is the value that determines the steepness of the curve? How is carrying capacity defined?
- Q4** - Is it necessary to introduce a lag effect between transmission and mortality? That is, are there infected individuals that have low mortality (recent infections) and infected individuals that have high mortality (old infections)? If this differential exists, is it important for any population dynamics process beyond mortality? Are other population processes important? For example, does infection reduce individual fecundity so that the broodstock estimated for a Beverton-Holt broodstock-recruitment relationship is not equivalent to adult abundance?