Wednesday Afternoon Breakout Group 1: Single species metapopulation model

- Q1 Is a 2 x N array sufficient; that is, N sites alongshore, but simply an offshore and inshore site perpendicular to shore?
- **Q2** Do infective particles have a distance dependent mortality rate and if so what is the form of the relationship?
- Q3 How do we define the recruitment process in the metapopulation? If the allee effect is assumed to always be local, can it be assumed that compensation is also local; that is, can compensation be modeled as local resource limitation?
- Q4 Is a distance dependent mortality rate on potential recruits (=larvae) need? If so, what is the relationship? Presumably the alongshore relationship is latitudinal, so that some changes in temperature are implicit. What population and disease processes vary enough with temperature that their paramterization will vary along the alongshore dimension? Can this be modeled by imposing a simple temperature gradient and Q₁₀ temperature relationship for these processes?
- **Q5** What circulation process are critical for inclusion in the transmission model?