Key Citations:

* Dyer and Rice 1999 – Nassella pulchra able to utilize soil moisture much deeper than exotic annuals (60-150cm deep, vs <30 cm deep preferred by annuals). Competition is most intense in spring. Focus on younger transplants .
  + Dense canopies prevent recruitment and growth of perennial grasses
    - Bartolome and Gemmill 1981
    - Dyer et al. 1996
    - Dyer and Rice 1997
  + Interpretation is that annual grasses have caused a shift in limitation from soil moisture to light
* Turnbull et al. 1999 – general description of competition and colonization tradeoffs. Species do compete for establishment sites and larger seeded species generally win in direct competition.
* Corbin and D’Antonio 2004
  + Competitive interactions in first growing season favored exotic grasses, but native perennials able to dominate mixed-assemblage plots.
  + Perennial individuals act as “incumbents”
  + Evidence from priority effects mediated through spatial pre-emption
    - However, note that this is in coastal grasslands, not the interior – interactions may be very different in these circumstances
* Hamilton et al. 1999 –emphasis on competition in existing fields containing N. pulchra individuals, conducted seed additions and greenhouse trials.
  + N. pulchra is very strongly seed limited
  + Persistence of N. pulchra individuals may be more driven by drought – annual grass seedlings are more affected by drought.
* Hobbs and Mooney (1991) – Bromus hordeaceous largely decreased in serpentine grassland during drought
* Lenihan et al. (2008) – climate change scenarios and vegetation change in California. Emphasis is that grasslands are expected to increase significantly in cover across different climate change scenarios.
* Harpole et al. (2007) – interactive effects of water addition and N fertilizer on grass abundance and productivity – emphasis on colimitation. Increasing water and N enrichment increased productivity of two dominant annual grasses. N addition also increased water use, particularly early in the season that may have driven earlier phenology and leaf senescence.
* Seabloom et al. (2003) –
  + Mutual stable equilibria; in a two species system if neither species can invade an equilibrial population of the other species, priority effects can lead to MSE. Resource pre-emption can lead to this.
  + What can cause invasive dominance?
    - Competitive superiority
    - Anthropogenic disturbance
    - Invasive priority
  + Natives appear to be competitively superior in many circumstances, but may be largely recruitment limited.
  + Perennials are better able to invade annual communities when seeds are added, suggesting that a competition colonization tradeoff might be governing this community.