**Veg model questions**

* Dieback versus mortality – Acute stresses like burial, scour, etc. cause mortality events and prolonged chronic stresses typically cause dieback. Dieback can also eventually lead to mortality because you eventually stress the plant so much that it can no longer produce enough carbohydrate to survive. Based on this interpretation, it seems like things like inundation, drought, herbivory, salt stress, should actually cause dieback, not direct mortality. How do we interpret lit data on mortality from chronic stress to simulate dieback rather than mortality?
* Should we try to conserve biomass? Photosynthesis produces biomass but we constrain plant size and don’t guarantee dispersal, tillering, or seed production if a plant becomes large – so what happens to the excess biomass if a maxed out plant can’t disperse or tiller?
* Dispersal and tillering have no biomass cost right now. Do we give it a cost? If so, how much and of what “parts”?
* Seed production is not accounted for, which isn’t an issue for these species, but may be for others. Do we add a seed production option? How would that affect colonization since seed distribution is not uniform?
* Should senescence be decoupled from dieback? They are currently combined, which effectively means that dieback from temperature extremes only occurs after peak photosynthesis.
* How often should we update the biomass distribution? Does it get updated after each event (e.g. dieback, dispersal) which results in multiple updates per model run or do we combine everything into one grand daily sort that accounts for dieback, tillering, etc.?
* Right now mortality occurs every day regardless of growing season. Does this make sense for all forms of mortality? Or is covered if we change some sources of mortality to dieback where dieback can occur only during the growing season but mortality can happen at any time? How does this relate to herbivory? There is a seasonality component to herbivory but should we consider it? It’s important to salt marshes where some die-off events have been linked to crab herbivory.
* How should we track dead biomass? Standing dead and dead root biomass can be important to physical coupling processes. How do we handle decomposition and removal of the dead plants?
* I’ve established a plant type variable 0=annual, 1=perennial herbaceous, 2=perennial woody based on how the plant stores biomass and how it grows. Right now we don’t have annuals but how would be model their emergence if we did? How do we simulate woody stem growth for woody perennials? Tillering isn’t quite the right process – they produce bigger and more branches. Are there other types we should consider like tree species and how different are they from woody perennials?
* How do we want to initiate competition? There are several competition mechanisms so we’d have to decide if we want to parse those out or just simulate the most common mechanisms (e.g. shading).