

Mulder, Christa (1988). "Seed Weight and Tolerance of Burial in *Oenothera parviflora* L., an Herbaceous Dune Species". Honors Theses.

*Oenothera parviflora* L. (Northern Evening Primrose) grows in the dunes at Seawall Beach, Maine. Its seeds are small and numerous, and are likely to get buried in their natural environment. Depth of burial significantly affects emergence from below 3 cm in depth, while seed weight does not significantly affect emergence from 3 or more cm of depth, but does affect emergence from lesser depths. Very small seeds have a lower percent emergence than heavier seeds at all depths. Time until emergence is affected by depth of burial, but not by seed weight. Surface-sown seeds have lower mortality than buried seeds. Depth of burial and seed weight may affect seedling weight, but the effects disappear over time. Seed position affects seed weight: seeds in the top of the capsule are lighter than those in the bottom of the capsule. Tolerance of burial and its relationship to the distribution, abundance, and life-history characteristics of *O. Parviflora* at Seawall Beach is discussed.