

SEALEVEL RISE AND SALTWATER INTRUSION

Fish responses to increased salinity and marsh fragmentation



Paul Leberg (Biology)

Mosquitofish have higher survival to salinity stress if they are from populations with elevated salinity. These differences have a genetic basis

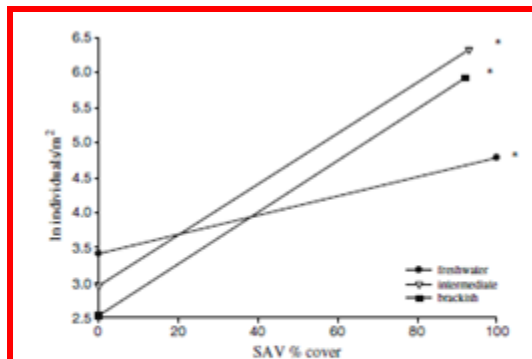
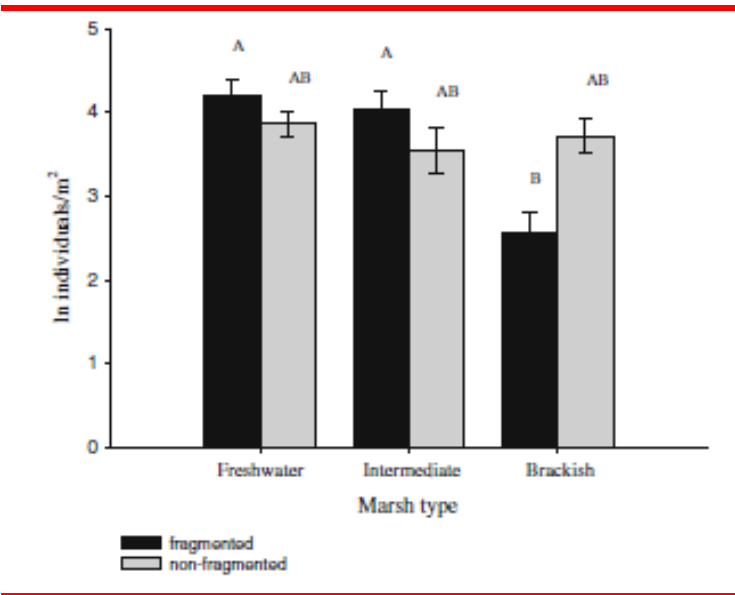
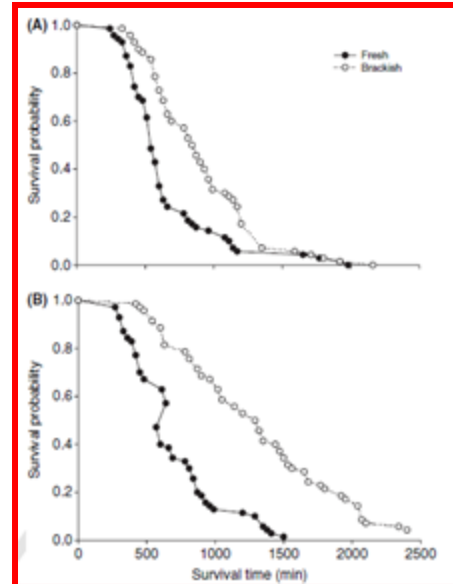


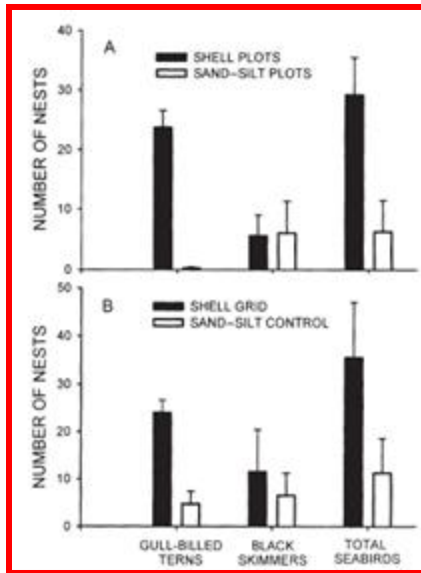
Fig. 2 Relationship of ln-transformed total nekton density (individuals/square meter) with percent SAV and marsh type. Relationships with slopes $>$ or $<$ 0 at the 0.05 level are indicated by an asterisk. Each line represents 84 samples

Salinity interacts with marsh fragmentation (left) the abundance to submerged aquatic vegetation (above) to affect marsh fish abundance populations

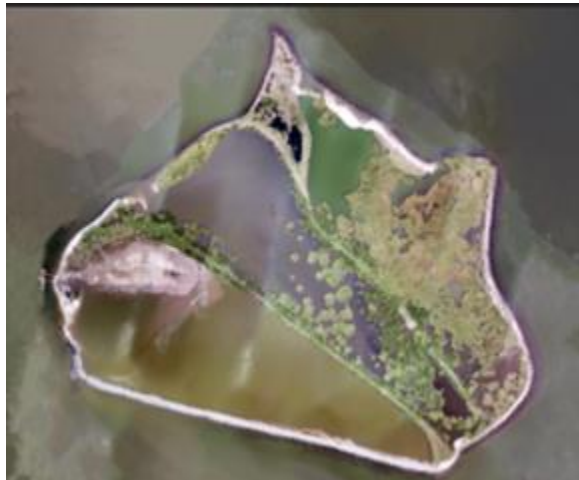
COASTAL LAND LOSS AND RESTORATION

Plant and Animal Responses

Paul Leberg (Biology)



Nest ecology
of sea birds
(left) and
pelicans
(below) can
help guide
island
restoration



Long-term investigations to determine what marsh and barrier island restoration practices result in suitable nesting and foraging habitat

Multi-disciplinary Research Directions

Paul Leberg (Biology)

How coastal landscape processes affect responses of wildlife and fish to major scale restoration projects such as diversions

How to make coastal restoration projects more resilient to storms without losing habitat value