Title: Population Ecology of an Enigmatic Bird of the Northern Plains

Abstract: The timing of breeding can have significant consequences on fitness. Franklin’s gull (*Leucophaeus pipixcan*) embryos respond developmentally to both photoperiod and seasonal cues, while eggs exhibit contrasting patterns of maternal investment. Posthatching growth also varies with the timing of breeding such that chicks hatched early in the season have slower growth than chicks hatched later. Variation in adult condition correlates with the timing of nesting as well. And like many migratory birds, Spring arrival date has advanced compared to historical records for this species. If arrival date relates to the timing of nesting, phenological shifts induced by climate will alter the physiology and development of offspring. If the timing of breeding programs offspring development, many of the metrics used to characterize seasonal patterns of reproductive success may be biased.