



ecology of the lesser prairie-chicken

The Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) (LEPC) is one of 12 species of grouse found in the United States. A brown, barred ground-nesting bird weighing from 1 to 2 pounds, LEPCs occur in areas of mixed or short grass prairie. Males are distinguishable from females by a black tuft of feathers, a yellow comb above the eyes and red air sacs on the neck that are very prominent during the breeding seasons. Males are known for their courtship display called “booming” that influenced ceremonial dances of the Plains tribes of Native Americans.

LEPCs have needs for different habitats (where they live) depending on the season of the year; but it is thought that for a group of birds using a lek complex (breeding area), their range can occur over 12,000 – 20,000 acres during the course of a year. The LEPC uses the different parts of its range according to the season, and the needs throughout its life cycle.

Breeding occurs primarily during March and April. LEPCs mate on what are known as leks, areas of sparse low growing vegetation that are often elevated above the surrounding area. Disturbed areas such as roads and gas well pads can also be used as lek sites. Males have strong “site fidelity” to individual leks, meaning they return to the same one year after year.

Nesting Habitat: After breeding, the females (hens) move onto nesting habitat. Hens usually nest within two miles of the lek in a mixture of grass interspersed with low-growing shrubs. Taller species of bunchgrasses, typically vegetation un-grazed or grazed lightly, are often selected for actual nest sites. Hens normally lay 12-15 eggs which hatch 24 days later.



Brood-Rearing Habitat: When her eggs hatch, the hen takes her group of chicks (or brood) to brood-rearing habitat. Brood-rearing habitat is typically more open with less dense and lower vegetation than nesting habitat with more forbs (broad-leafed herbaceous vegetation) than grass. This allows the chicks to move more freely and produces a higher abundance of insects which is very important since they make up the bulk of the young birds diet.



Fall/Winter Habitat: Habitat during the fall and winter looks a lot like nesting and brood rearing habitat but the birds tend to range across a broader area. During these seasons of the year, LEPCs may use small grain crop fields if there is enough waste grain available, and if the field is near enough to native grassland to provide enough cover and resting sites. Shinnery oak mottes (areas of low-growing oaks typically of sandier areas in rangelands) are also used during these seasons as the acorns and leaves provide food resources as well.



LEPC Diet: LEPCs eat insects, seeds, leaves, buds and sometimes cultivated crops. Insects are particularly important to young birds less than 10 weeks of age. LEPCs obtain the water they need from the food they eat, so while not requiring surface water, they will use water when it is available.

Predators, Parasites and Diseases of LEPC: Like other grouse, LEPCs typically have short life spans and many are lost to predators such as hawks, eagles, and coyotes. Nests are also preyed upon by birds, such as ravens, small mammals and reptiles. Diseases and parasites have been identified in LEPCs but neither is thought to have negatively impacted overall number of birds on the range.