ing the wide, wild prairie to a checkered pattern of grain fields, pastures, and hayfields — unwittingly creating a game haven. The "substitute prairie" provided grassy cover essential for nesting and roosting and crop fields offered copious food (Yeatter 1943).

By 1853 prairie-chickens were measured at Chicago markets by the cord and ton. A hunter could make a good living providing chickens for the table. One, H. Clay Merritt, reported that flocks of chickens a half mile long were common in northern Illinois. When the ground was covered with snow, prairie-chickens would sit wing-to-wing atop fences stretching for miles (Lockhart 1960). Hunters were eagerly sought by farmers, who offered free food for both the hunter and his horse (Westemeier 1985).

Live birds were also sent to market. Merritt recalled one family who captured 500 birds in a single week by setting traps in their garden (Lockhart 1960). Nests were so concentrated in some areas that collecting from 100 to 500 eggs within a half mile area was not remarkable (Westemeier 1985). In 1873, a Chicago company received and sold 25,000 birds. That year alone 600,000 prairie-chickens were bought to Chicago at \$3.25 per dozen (Leopold 1949).

## Population Decline

In 1881, hunters were advised that the best shooting was west of Illinois, despite the presence of large flocks in several areas of the state. But the prairie-chicken population, which may have peaked with possibly as many as 14 million birds as early as the 1850s, was already declining (Westemeier 1985). The hunting season was closed for two years, in 1887 and 1889, reopened and finally closed in 1933.

William Hornaday, director of a New York zoo and a tireless critic of hunting excesses stated in his 1904 book, *The American Natural His*tory:

"The prairie-chicken lives chiefly in the memories of those who from 1860 to 1875 were 'Wisconsin men' or boys. Railroads were few, all guns were muzzle-loaders, and the game-dealers of Chicago were not stretching out their deadly tentacles, like so many long-armed octopi, to

'When the ground was covered with snow, prairie-chickens would sit wing-to-wing atop fences stretching for miles.'

suck the last drop of wild blood from prairie and forest. Today the prairie-chicken is to be numbered with the buffalo and passenger-pigeon. It is so nearly extinct that only a few flocks remain, the most of which are in Kansas and Nebraska. It is useless to describe this bird. The chances are that no reader will ever see one outside a museum."

Hornaday added that many birds were also killed each winter when they flew into telegraph wires.

Despite Hornaday's indictment of hunters, the plummeting of prairie-chicken populations was more due to changing in land use. In the early 1900s, tractors replaced horses and hayfields giving way to larger crop fields. The once-favorable prairie-chicken habitat began to disappear. Yet prairie-chickens hung on in 92 out of 102 counties as late as 1912, according to research by Dr.

Stephen A. Forbes (Westemeier 1985).

During the Great Depression, the chickens got a reprieve. The Cropland Adjustment Act of 1934 and 1935 was the first in a series of programs designed to take land out of cultivation, thereby decreasing supply and increasing price of grains. Cropland was returned to grassland. Once again the landscape took on the checkered look that favored the prairie-chicken (Westemeier and Edwards 1987).

## Pheasant Interference

But then came another factor in the life equation of the prairie-chicken: the Ring-necked Pheasant, an Asian species, introduced into what were once exclusively chicken habitats. Pheasant cocks interfered with chicken cocks on the booming grounds, but more significantly, pheasant hens became nest parasites. A prairie-chicken egg requires about 25 days incubation; a pheasant only 23 days. The chicken hen leaves the nest the day after pipping begins, so if the first chick is a pheasant, the hen may abandon her own unhatched eggs, and begin brooding surrogate chicks. The effect on chickens was devastating (Westemeier and Edwards 1987).

Researchers also suspect that due to pheasant interference on the booming ground, some chicken hens began laying eggs before copulation. This disruption may lower embryo survival in unparasitized nests and may also cause increased nest desertion.

Today, a remnant population survives only in the gray prairie region in southeastern Illinois, mostly in Jasper and Marion counties. The gray prairie soil, characterized by light-colored silt loams and poorly drained, tight clay subsoils was ideal for growing grasses such as redtop