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## NEBRASKA SANDHILLS PROGRESS REPORT No. 2 - May 6, 2012

We have completed the spring trapping and radio-marking of greater prairie-chickens (*Tympanuchus cupido pinnatus*) in Nebraska for 2012. We started in late March by locating and getting permission to trap on booming grounds on private ranches in the Sandhills near Rose, Nebraska, about 26 miles south of Bassett. Bill Vodenhal, Wildlife Biologist with the Nebraska Game and Parks Commission (NGPC) served as the liaison to local landowners and was critical in quickly helping obtain permission to access ranches to trap and study prairie grouse ecology.

A crew of seven individuals (Gary Huschle, Matt Rethaber, Perre Kerch, Terry Wolfe, Krista Kenyon, Tim Baker and myself) used six vehicles and two ATV's to trap a total of 147 prairie grouse (55 cocks, 92 hens) in 20 days with 11 actual days of trapping. This total includes 139 greater prairie-chickens (52 cocks, 87 hens), 7 sharp-tailed grouse (*Tympanuchus phasianellus*) (3 cocks, 4 hens) and one hen prairie-chicken X sharptail hybrid. A total of 131 of the 147 prairie grouse captured and released were radio-marked and broken down as follows: 123 prairie-chickens, (38 cocks, 85 hens) 7 sharptails (3 cocks, 4 hens) and one hen prairie chicken x sharptail hybrid. The immature to adult ratio of captured birds was 0.76:1.00.

These birds were trapped on ten different ranches and 23 different display grounds. Birds were captured on all of the display grounds we set traps on. We trapped hens on 22 of the 23 grounds and 15 hens were captured on one booming ground.

Five birds died (3.4%) as a result of our trapping activities and all were prairie-chickens: 3 cocks and 2 hens; 2 cocks and a hen died of "shock" and a cock and a hen were killed while in traps, one by a red-tailed hawk (*Buteo jamaicensis*) and the other probably by a great horned owl (*Bubo virginianus*). We also found three prairie-chickens (1 cock and 2 hens) dead intact on roads that probably collided with the electric distribution lines.

The large number of hens trapped is a big plus but should not come as a surprise as we trapped and radio-marked 104 hens in northwestern Minnesota in 2006. The next step will be to find all of these radioed birds and monitor nesting and survival, and then capture a large number of young of the year this summer to document dispersal. The larger number of hens radioed in Nebraska was deemed necessary in order to obtain a good sample of chicks to study dispersal and also because access within the Sandhills is limited to a few two track trails. This type

of access is in contrast to Wisconsin, Minnesota and North Dakota where there is a road just about every mile. Consequently, it will take considerable time and effort to find all these birds, especially the young hens.

The capture of a large number of chicks this summer along with the large number of birds already radio-marked means we should be able to maintain a good sample size and possibly avoid the additional cost of trapping on the booming grounds in 2013.

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