Elizabeth Madden, 6 February 2004

Shake Your Tail Feathers

Sharpies perform at Medicine Lake Wildlife Refuge

By Elizabeth Madden

Spring on the prairies of northeast Montana is always a long time coming each year. Along with meadowlarks and prairie crocuses, one of the first harbingers of this long-anticipated season is the "coo-cooing" of the sharp-tailed grouse on their dancing grounds. Our hearts soar when we hear it!

The grouse, too, are eager, often beginning their spring ritual when the prairie is still dotted with remnant snow banks and nights are frigid. Like clockwork, they return every April to traditional dancing grounds, called leks. They choose knolls or other sites with short grass and 360-degree views in order to watch for predators, and they use these same spots year after year. Each morning at the crack of dawn, the male grouse move into their established territories within the lek. With white tails pointed skyward and wings outstretched, they stomp their feet at a frantic pace and rattle their tail feathers, creating a drumming noise. Between dances, they make gurgling noises by expelling air from the purple sacs located on their necks. On a calm morning, their commotion can be heard from more than a mile away. What are they up to, anyway? Are they just happy spring is here? Despite their apparent frivolity, their goal is a serious one: to attract the attention of female sharp-tails and win the opportunity to mate.

Biologists throughout Montana conduct counts of male sharp-tails on dancing grounds each spring, gathering data that serve as a long-term index to their population status. Although some leks can be viewed and counted from vehicles with spotting scopes, many are off the beaten path and require some hiking – for example, those in the remote Medicine Lake sandhills. Getting close enough to survey these leks involves the old-fashioned elbow-and-knee "sneak" through the grass, using subtle rises in topography as cover. If your sneak is successful, you are only meters away from this fascinating spectacle of nature. You count the number of males dancing, and also note any females that are visiting the ground. They tend to wander slowly around the lek, appearing aloof and bored, although they are faced with an important decision: which male will provide the best genetic contribution to their offspring?

The surest sign that a female is present on a lek is the ensuing frenzy of dancing. The males do everything short of standing on their heads to woo this prospective mate. Texts describing their elaborate rituals read like an athletics training manual, defining face-offs, stand-offs, forward rushes, parallel runs, foot-stomping and freezes. The grouse's vocalizations are as complex, featuring cackles, coos, chilks, corks, gobbles and whines. Even their costumes are garish, with the males sporting bright yellow eye combs and violet throat sacs on each side of their neck.

Research has shown that very few males do most of the mating, and they tend to hold the central territories on the lek. After considering her options, each female eventually chooses a mate and signals him by exhibiting her white shoulder spots and squatting with her wings slightly out-stretched. Mating occurs quickly, often with neighboring males trying to disrupt the process by knocking the male off the female. If the pairing is successful, the hen will lay her first egg within 3 days in a nest tucked into the prairie somewhere within a mile of the lek.

A morning spent as witness to the sharp-tails' courtship ritual is one of those experiences all Montanans should have on their life "to-do" list. An easier way than "putting on the sneak" is to use a viewing blind, such as the one available on a dancing ground at Medicine Lake National Wildlife Refuge, in northeastern Montana (22 miles south of Plentywood). For information on reserving and using the blind, and to watch a one-minute video clip of grouse dancing, visit http://medicinelake.fws.gov, or call 406-789-2305 for assistance.

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Photo Caption:

Sharp-tail grouse are found throughout the prairies of eastern and central Montana. Other species of grouse in Montana include ruffed, spruce and blue grouse in the forests of western Montana; sage grouse in the central sagebrush habitat; and the white-tailed ptarmigan, found in the high elevations of Glacier National Park.

Photo Caption:

Sharp-tails are named for the long, central pair of tail feathers that extend beyond the rest of the tail. During courtship displays, male grouse point their tails skyward and stomp their feet at a rate of 20 times per second.